FHI 059, Version 12		Issued by: FHI	Date of issue: 08/10/2018
Case No: 2020-0086			Date of visit: 15/05/2020
Time spent on site:	ır	Main Inspecto	r:
Site No: FS0903 Business No: FB0440	Site Name: Business Name:	Swining Voe 3 Grieg Seafood Shetland Ltd	
Case Types: 1 PSI 2	3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed N
Observations:	Region: SH	Water type: S	CoGP MA S-4
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	If yes, see additional inform	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit deta	il reason below:	

MRT01601 (06/04/2020) - 5,158 (1.28%) - 2019 S1 - Physical damage following mechanical lice treatment. Harvesting to begin soon.

MRT01629 (04/05/2020) - 10,708 (2.85%) - 2019 S2 - Treatment losses / CMS

Mortality last 4 weeks:

W/b 13th April: 2,478 (0.62%) - attributed to CMS (affecting entire site however cages 2 and 3 are experiencing more mortalities from this)

W/b 20th: 3,458 (0.88%) - CMS W/b 27th: 2,407 (0.62%) - CMS

W/b 4th May: 10,708 (2.85%) - Losses after freshwater treatment/crowding/stress. Mortalities reduced the following week and sea lice numbers have also reduced.

Sea lice weekly counts over 2 since August:

Wk39: 3.3

Wk40: 3.85 followed by a freshwater treatment, lice load was reduced to below 1. Wk46: 3.66 followed by a physical treatment, lice load was reduced to below 1. Wk51: 3.6 followed by a physical treatment, lice load was reduced to below 1. Wk4: 5.4 followed by a physical treatment, lice load was reduced to below 1.

Wk8: 2.95

Wk9: 2.5 followed by a physical treatment, lice load was reduced to below 1.

Wk15: 2.53

Wk16: 5.22 followed by a freshwater treatment, lice load was reduced to below 1.

Site receives fish input from Girlsta Hatchery FS0504.

Site due to begin harvesting at the beginning of June 2020. The site is expected to be fallow by the middle of July. Site currently only doing dead haul harvests.

PSI completed due to COVID-19 lockdown restrictions preventing a site inspection.

FHI 059, Version 12			Issued by: Fl	Н		Date of issu	e: 08/10/2018
Case No: 20	20-0086	Site No:	FS0903				
Date of case: 15/05	/2020			Inspector(s):			
Business/site contact	s correct? (if no update	e site summa	ary sheet)		ı	N	
Site Details							
Total No facilities	12	No facilities	stocked	11			
Species SAL Age group 19 S1							
No Fish 370,0							
Mean Fish Wt 4.5kg							
Next Fallow Date (Site		2020	Next Input D	ate (Site)	January 202	1	
Date of last inspection	<u> </u>	07/08/2019		` ,			
Any recent increased	or atypical mortalities?	(last 4 wee	ks)			Y	
If yes, detail:	W/b 4th May: 10,708	-	-	eshwater treatn	nent/crowding	/stress	
e.g. site		(=,					
average, max							
per cage							
A !	''' 0 /-'	· · · · · · · ·				V	
	ities? (since last insper	ction.)				Y	
If yes, detail: See a	additional comments.						
						Whole fish -	
How are mortalities d	ispased of?					TWMA (Shetland)	
If other detail:	isposed or:					(Grictiana)	
						V	
Any treatments? (since						Y	
If yes, detail: T.M.S Other:).						
Any disease on site?		<u> </u>	2 12	0		Y	
•	affecting whole site, m nent in Wk16 will be th		-	_	•		
lieati	nent in vvk to will be th	e iasi iieaiii	ieni unui nari	rest at the begi	illing of June	•	
Has any animal health of, the business?	h surveillance or diagn	ostic investi	gations been	carried out by,	or on behalf	Y	
Any significant results	:7					Y	
	ne vet visit in April con	firmed prese	ence of CMS.	Site manager	is still awaitin	g results from	
	tine vet visit 14/05/202	•		one manager		9.0000	
le there e history of a	na lina inavan at the ait	a in praviau	1 110000			NI	
If yes, detail:	ea lice issues at the sit	e in previous	s 4 years			IN	
ii yes, detaii.							
	keep lice levels below					N	
	as responded to any i						
Inese	e have had good clear	ance rates w	ith levels aro	pping to below	1 following in	tervention.	
Treatment discharge						Y	
If yes, detail: Salmo	osan	Slice		H2O2		Alphamax	
Where sea lice treatm	nents have been admir	nistered have	e they had an	effect?		Y	
If no, detail:							
	a agrooment in place?					V	
is a management are	a agreement in place?					Ť	
Does your CoGP Fari	m management area f	allow in sync	hrony?			Y	

Any reported escapes? (check prior to phone call) Any escapes? (since last inspection)	N
If yes, detail: (include date)	
Any significant changes to your biosecurity procedures since previous visit?	N
If yes detail.	

FHI 059, Version 12		Issued by: FHI			Date o	of issue	: 08/10/2018
Case Number:	2020-0086		Site No:	FS0903		Insp:	
Date of Visit	15/05/2020		No of m	ovements/s	supp./dest.		Score
Live fish movements			() 1-5	6-10	>10	
Movements on (from out	Frequency of m	novements on from equivalent MS		5	10	14	5
with GB) of susceptible species		novements on from equivalent zone o		9	18	26	0
	Number of sup	ncluding third country pliers		5 5	10	14	5
Movements off	Frequency of m			0 3	6	10	3
Movements on	Number of des			3	6	10	3
Exposure via water		Site contac	ts (1-5	6-10		
Water contacts with other farms (holding species	disinfection or l	,	(
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		ш
		or in a coastal zone with category V n or within 1 tidal excursion		1 4	8		ш
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	g plant discharging into adjacent wate		1	2		0
On farm processing within the rules of the directive	No on farm pro		(0
	Processing own	n fish (re-cycling risk)		1			
	Processing fish	from MS of equivalent status	:	2			
	equivalent statu		4	1			
		r from Category III farm	3	3			
	Processing fish	n from Category ∨ farm	10	o o			
Disposal of fish and fish by-	Site's own was	te only processed.	(
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		_ 5]			0
	Feeding unpas	teurised feed		5			ш
Biosecurity		Number of site	es '	1 2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	(1	2		2
	Sites sharing s	taff and equipment	(1	2		2
Disinfection of equipment	Yes			5			0
between sites, use of footbaths etc	No			1			Н
CoGP/Regulator				_			
Practices in accordance	Yes						0
with regulator or industry code of practice	No		;	3			
Platform access to cages	Yes			ol .			0
	No			2			
					Total Rank		25 MEDIUM

Case No:	2020-0086			Date of visit:	15/05/2020			
Site No:	FS0903	l	Inspector:					
Results Summary	Freq.			Da	te of Notificat	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary				1				
Report Summary Case Type	Date	Inch	and Image					
PSI	18/05/2020	Insp	2 nd Insp					
F 51	10/03/2020							
	 							
	 							
	 							





Grieg Seafood Shetland Ltd Gremista Lerwick Shetland ZE1 OPX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO FB0440 SITE NO FS0903 INSPECTOR
 DATE OF CASE
 15/05/2020

 SITE NAME
 Swining Voe 3

 CASE NO
 20200086

Passive Surveillance Inspection

A notification of mortality levels above the reporting criteria was received by the Fish Health Inspectorate on 14/04/2020 and 12/05/2020 for the period of 06/04/2020 to 12/04/2020 and 04/05/2020 to 10/05/2020 respectively.

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice).

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

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.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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

Signed:

Date: 18/05/2020

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

R28

FHI 059, Version 12		Issued by: FHI		Date of issue: 08/10/2018
Case No: 2020-0180				Date of visit: 04/05/2020
Time spent on site:	I/A		Main Inspecto	r:
Site No: SS0840 Business No: SB0108	Site Name: Business Name:	Seaforth South Alisdair Cunningl	ham	
Case Types: 1 SAM	2 3	4	5	6
Water Temp (°C): N/A	Thermometer No:			FHI 045 completed
Observations:	Region: WI	Water type:	S	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed?	•	N/A If yes, see a	dditional inforr	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
Diagnostic samples taken?				
UNI/REG only - if unable to carry	out intended visit deta	il reason below:		

Site operator called the FHI on the 13/3/2020 to report that he had shipped a tonne of mussels to a customer on the 2/3/2020 however on receipt there were a large quantity gaping. It was also reported that there following grading a number of gaping shells were noted. There has been no issues of this type before, he was very concerned on what the cause was.

At the time of notification the FHI were due to be in the area and samples were to be collected but due to Covid-19 and travel restrictions it was not possible to visit the site. This was relayed to the operator who was going to monitor the situation and report back if the issue was ongoing. On the 25/3/2020 I spoke to the operator to find out how the situation was and he reported that he was going out to site in the next few days and would update.

The operator contacted the FHI near the end of April and reported that he was now observing some dead mussels on the lines and he was keen to have samples taken. He had been in discussion with the fish farms in the area and they had reported that there had been plankton blooms in the loch.

Following discussions with colleagues arrangements were made for the operator to post samples in for sampling. It was advised to send in 50 shells however 30 were received on the 5/5/2020 for processing.

FHI 059, Version 12		ı	Issued by: FHI		Date of	f issue: 08/10/2018
Case No:	2020-0180	Site No:	SS084	10		
Date of Visit:		04/05/2020		Inspector(s):		
Registration/Authornal 1. Business/site deta 2. Changes made to	ails summary	ails checked by site repres	entative?		N N/A	
Site Details Total No facilities Species		Facilities	s stocked		No facilities inspec	cted
Age group No Fish						
Mean Fish Wt Next Fallow Date (S	lite)		Next Input D	Date (Site)		
Recent (last 4 wks) If yes, detail:	disease proble	ems?		Any escapes	(since last visit)?	
5. Are records comp6. Are health certific	ds available for ection: plete and corre ecords available plete and corre eates for introd	ectly entered? le for dead fish and was				N/A N/A N/A N/A
•	nts carried out	t by (or on behalf) of the or maintenance of trans				
Mortality Records 1. Mortality records 2. How are mortalities		•				N/A
If other detail: 3. Mortality records 4. Recent mortality (•	correctly entered?				N/A
5. Evidence of recer If yes, facility nos/no		typical mortalities? facility/no stock per fac	cility/reason:			N/A
	n mortality dur	ring period checked?				N/A
If yes, detail action:		mortalities been reporte				N/A
8. Have 'mortality ev	∕ents' been rer	ported to FHI? If no, ad	dd MRT case and	l enter on morta	ility events sheet.	N/A

FHI 059, Version 12	Issued by: FHI	Date of issue: 08/10/2018
1. Recent treatments (last 4 wks)?		
If yes, detail:		
If other, detail:	-1:2	
2. Medicines records available for inspe-		
3. Are records complete and correctly er 4. Are fish in a withdrawal period?	ntered?	
5. If yes, what treatment(s)?		
If other, detail:		
6. Are medicines stored appropriately?		
Biosecurity Records		
Biosecurity records available for inspect.		
	ortality removal, recording and safe disposal be	
 Has the manner and period in which tincreased (unexplained) mortality at the 	the APB will notify Scottish Ministers or vetering	lary professional of any
micreased (unexplained) mortality at the	: Site been included:	
4 Has the action that will be taken in the	e event that the presence or suspicion of the p	presence of a listed disease
	when that will be notified to Scottish Ministers	
5. Has the health status of aquaculture a	animals being stocked on the farm site been o	covered (equal or higher
health status, certification if required)?		
•	measures implemented between each epidem	
·	movement of staff, visitors, equipment, live or	
	the measures in place to maintain the physical	al containment of
aquaculture animals held on site?		
8. Have the biosecurity procedures been	n adequately implemented on site?	
If no, detail:		

N/A

1. Has any animal health surveillance been carried out by, or on behalf of, the business?

Results of Surveillance

3. Any significant results?

2. If yes, are results available for inspection?

If yes, detail (if not detailed under recent disease problems).

Records checked between:

N/A

Total Samples

	Pool/Fish No	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
	Fish nos												
	Pool Group												
	Species	MED											
	Average weight	N/A											
	Sex	N/A		N/A									
	Water Type	SW											
Stock Details	Stock Origin Facility No	Wild Spat											
Ś	racility No	N/A											

starts/ends:

Environmental conditions:

HIST

Summary samples

Add Fish/Pools - click

05/2020 Additional Sample Information: Samples posted in by site owner and processed by lab staff. 30 Total Tests assigned 3 F15 F16 F26 F13 F14 F17 F18 F19 F20 F21 F22 F23 F24 F25 F27 F28 MED N/A SW Wild Spat **Wild Spat** Wild Spat Wild Spat Wild Spat Wild Spat Wild Spat Wild Spat

N/A

N/A

N/A

Case No:	2020-0180			Date of visit:	04/05/2020				
Site No:	SS0840	1	Inspector: DJT						
Results Summary	Freq.				te of Notificat				
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp	
Histo:tissues within normal range	n/a	N/A		19/05/2020		09/06/2020			
Vibrio spp. (5 separate isolates)	6/6	29/05/2020		29/05/2020		09/06/2020			
Unidentified bacteria	6/6	01/06/2020		01/06/2020		09/06/2020			
				•					
Report Summary									
Case Type	Date	Insp	2 nd Insp						
SAM	01/06/2020								





Lime Park Scalpay Western Isles HS4 3XZ

FISH HEALTH INSPECTORATE REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO SB0108 SITE NO SS0840 INSPECTOR DATE OF VISIT 04/05/2020 SITE NAME Seaforth South CASE NO 20200180

Section 1: Summary

Following a report of gaping shells being observed at Seaforth South, 30 mussels (*Mytilus edulis*) were posted to the Marine Laboratory for diagnostic sampling.

Histopathological examination revealed that the tissue samples appeared within the normal range.

Haemolymph was extracted from 6 affected mussels and inoculated onto appropriate media. Five separate *Vibrio* spp. were identified along with one further non-pathogenic bacteria which was not fully identified. The mixed nature of the growth would not suggest that the bacteria isolated would be the primary cause of morbidity.

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

On the 13th March 2020 the site owner contacted the Fish Health Inspectorate to report that gaping shells were being observed shortly after harvest or following grading activities. A site inspection had been organised however, the travel restrictions imposed due to COVID-19 resulted in the cancelation of the inspection. It was decided that the operator should monitor the situation and report back should the issues continue. In late April it was reported that the situation had not improved and that gaping shells were being observed on the lines, it was agreed that samples should be posted to the lab for diagnostic sampling. The mussels were received on the 5th May 2020.

Samples

Samples were collected from 30 shellfish according to the table below:

Shellfish number	Species	Stage	Origin
F1-30	Mytilus edulis	Spat	Natural spat collection

Results

Bacteriology: Haemolymph from F1 – 6 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- 5 separate Vibrio spp. isolates;
- 1 non shellfish pathogen likely of environmental origin.

The level of growth observed was moderate to heavy in all but F5 which had light mixed growth. No healthy mussels were provided for sampling therefore, making a comparison of the bacterial populations of affected and unaffected animals could not be achieved.

Histology: Tissue samples were taken from 30 mussels. The tissue samples were fixed in Davidson's fixative.

Histopathological examination revealed the following:

F14 & F16 displayed two and three granylocytome-like structures in the vesicular connective tissue of digestive gland.

F19 exhibited two small foci of haemocytic infiltration in the vesicular connective tissue.

Mussels appeared within the normal range.

Signed: Date: 09/06/2020
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

FHI 059, Version 12		Issued by: FHI	Date of issue: 08/10/2018
Case No: 2020-0181			Date of visit: 04/05/2020
Time spent on site:	I/A	Main Ins	pector:
Site No: SS0164 Business No: SB0108	Site Name: Business Name:	Fuam an Tolla (Site 2) Alisdair Cunningham	
Case Types: 1 SAM	2 3	4 5	6
Water Temp (°C): N/A	Thermometer No:		FHI 045 completed
Observations:	Region: WI	Water type: S	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observe Gross pathology observed?	•	N/A If yes, see additional	information/clinical score sheet. information/clinical score sheet. information/clinical score sheet.
Diagnostic samples taken?			
UNI/REG only - if unable to carry	out intended visit deta	il reason below:	

Site operator called the FHI on the 13/32020 to report that he had shipped a tonne of mussels to a customer on the 2/3/2020 however on receipt there were a large quantity gaping. It was also reported that there following grading a number of gaping shells were noted. There has been no issues of this type before, he was very concerned on what the cause was.

At the time of notification the FHI were due to be in the area and samples were to be collected but due to Covid-19 and travel restrictions it was not possible to visit the site. This was relayed to the operator who was going to monitor the situation and report back if the issue was ongoing. On the 25/3/2020 I spoke to the operator to find out how the situation was and he reported that he was going out to site in the next few days and would update.

The operator contacted the FHI near the end of April and reported that he was now observing some dead mussels on the lines and he was keen to have samples taken. He had been in discussions with the fish farms in the area and they had reported that there had been plankton blooms in the loch.

Following discussions with colleagues arrangements were made for the operator to post samples in for sampling. It was advised to send in 50 shells however 20 were received (one of which was dead) on the 5/5/2020 for processing.

FHI 059, Version 12	Issue	ed by: FHI	Date	of issue: 08/1	0/2018	
Case No: 2020-0181	Site No:	SS0164				
Date of Visit:	04/05/2020		Inspector(s):			
Registration/Authorisation Details 1. Business/site details summary ch 2. Changes made to details?		tive?		N/A N/A	\exists	
Site Details Total No facilities Species Age group No Fish	/A Facilities stoo	cked		No facilities inspe	ected	
Mean Fish Wt						
Next Fallow Date (Site)		Next Input Dat	te (Site)	.		
Recent (last 4 wks) disease problem If yes, detail:	ıs?	N/A	Any escapes	(since last visit)?	N/A	
Movement Records						
 Movement records available for in Date of last inspection: Are records complete and correct Are movement records available of Are records complete and correct Are health certificates for introduction 	ily entered? for dead fish and waste? ily entered?	ble?		N/A	E	N/A N/A N/A N/A
Transport Records	dons (odtwith Ob) availa	DIC:			_	14// (
Are any movements carried out by If yes, is there a system in place for		•	_		F	
Mortality Records 1. Mortality records available for insp 2. How are mortalities disposed of?	pection?	ı				N/A
If other detail: 3. Mortality records complete and compl	prrectly entered?					N/A
4. Recent mortality (last 4 wks):	meday emerca.					
5. Evidence of recent increased/atyp If yes, facility nos/no mortality per fa		reason:				N/A
						NI/A
6. Any other peaks in mortality durin If yes, detail:	g period checked?					N/A
7. Have increased (unexplained) mo	rtalities been reported to	vet or FHI?				N/A
If yes, detail action: 8. Have 'mortality events' been repo	rted to FHI2 If no. add M	RT case and e	nter on morta	lity events sheet		N/A

FHI 059, Version 12	Issued by: FHI	Date of issue: 08/10/2018
1. Recent treatments (last 4 wks)?		
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)?		
of ther, detail:		
6. Are medicines stored appropriately?		
o. Are medicines stored appropriately:		
Biosecurity Records		
Biosecurity records available for inspection?		
2. Has the manner and frequency of mortality removal,	-	
3. Has the manner and period in which the APB will not	*	al of any
increased (unexplained) mortality at the site been inclu	uded?	
4. I lee the estion that will be taken in the event that the	nunnana avananisian af tha nunnana af a li	ata d diagona
Has the action that will be taken in the event that the is detected been included and how and when that will	· · · · · · · · · · · · · · · · · · ·	sted disease
5. Has the health status of aquaculture animals being s		or higher
bealth status, certification if required)?	stocked on the farm site been covered (equal)	or riigitei
nouni otatao, con incation in roquirou).		
6. Have the husbandry and biosecurity measures imple	emented between each epidemiological unit to	minimise
transmission of disease been covered (movement of st		
7. Is documentation available regarding the measures i		
aquaculture animals held on site?		
8. Have the biosecurity procedures been adequately im	plemented on site?	
If no, detail:		
Results of Surveillance		
1 Has any animal health surveillance been carried out	by or on hehalf of the business?	N/A

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:

N/A

	Priority samples:	VI		ВА		РА		MG	Samplir	ng: HI		l	
ı	Time sampling starts/ends:	10:0	00:00	11:0	0:00	ı	Inspect	or:		1	VMD N	0.	
	Environmental conditions:	1		2		3		4		5		1	
ı	Summary samples	HIST		ВА	Υ	MG		VI		PA		Total Sa	amples
A	Add Fish/Pools - click												
	Pool/Fish No	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
	Fish nos	1	2	3	4	5	6	7	8	9	10	11	12
	Pool Group												
	Species	MED											
	Average weight	N/A											
	Sex	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A
	Water Type	SW											
och Detaile	Stock Origin	Wild spat											
ť	Facility No	N/A											

1111 000, 10101011 12		looded by. 1111	
05/2020 Additional Sample Info	ormation:		
19 Total Tests as	signed 3		
101411031343	oigned o		
F13 F14 F15 F16	F17 F18 F19		
13 14 15 16	17 18 19		
MED MED MED	MED MED MED		
N/A N/A N/A	N/A N/A N/A		
N/A N/A N/A	N/A N/A N/A		
SW SW SW	SW SW SW		
Wild spat Wild spat	Wild spat Wild spat		
N/A N/A N/A	N/A N/A N/A		

Case No:	2020-0181	1		Date of visit:	04/05/2020]			
Site No:	SS0164]	DJT]					
Results Summary	Freq.	Date of Notification							
,		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp	
Histo:samples within normal range	N/A	N/A		19/05/2020		09/06/2020			
Vibrio spp.	6/6	29/05/2020		29/05/2020		09/06/2020		1	
Shawanella spp.	4/6	29/05/2020		29/05/2020		09/06/2020		†	
Unidentified bacteria	6/6	29/05/2020		29/05/2020		09/06/2020			
	-	20/00/2020		20,00,2020				1	
		<u> </u>			†	-		†	
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Report Summary									
Case Type SAM	Date	Insp	2 nd Insp						
SAM	01/06/2020								
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	1	-							
	1		-						





Lime Park Scalpay Western Isles HS4 3XZ

FISH HEALTH INSPECTORATE REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No SB0108 SITE NO

INSPECTOR

SS0164

DATE OF VISIT SITE NAME 04/05/2020

Fuam an Tolla (Site 2)

CASE NO 20200181

Section 1: Summary

Following a report of gaping shells being observed at Fuam an Tolla (Site 2), 19 mussels (Mytilus edulis) were posted to the Marine Laboratory for diagnostic sampling.

Histopathological examination revealed that the tissue samples appeared within the normal range.

Haemolymph was extracted from six affected mussels and inoculated onto appropriate media. Four separate Vibrio spp. and Shewanella spp. were identified along with one further nonpathogenic bacteria which was not fully identified. The mixed nature of the growth would not suggest that the bacteria isolated would be the primary cause of morbidity.

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

On the 13th March 2020 the site owner contacted the Fish Health Inspectorate to report that gaping shells were being observed shortly after harvest or following grading activities. A site inspection had been organised however, the travel restrictions imposed due to COVID-19 resulted in the cancelation of the inspection. It was decided that the operator should monitor the situation and report back should the issues continue. In late April it was reported that the situation had not improved and that gaping shells were being observed on the lines, it was agreed that samples should be posted to the lab for diagnostic sampling. The mussels were received on the 5th May 2020.

Samples

Samples were collected from 19 shellfish according to the table below:

1	Shellfish number	Species	Stage	Origin		
	F1-19	Mytilus edulis	Spat	Natural spat collection		

Results

Bacteriology: Haemolymph from F1 – 6 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- 4 separate Vibrio spp. isolates;
- Shewanella sp.;
- 1 non shellfish pathogen likely of environmental origin.

The level of growth observed was moderate to heavy in all six mussels. No healthy mussels were provided for sampling therefore, making a comparison of the bacterial populations of affected and unaffected animals could not be achieved.

Histology: Tissue samples were taken from 19 mussels. The tissue samples were fixed in Davidson's fixative.

Histopathological examination revealed the following:

F2 displayed mild haemocytic cell infiltration in the gonadal tissue.

F3 displayed a copepod-like structure and F16 one encysted metacercariae.

F5 exhibited a mild haemocytic cell infiltration in the vesicular connective tissue (CT) and F18 several small foci haemocytic cell infiltration in CT.

F16 & F18 displayed a light atrophy of epithelia of digestive diverticula.

Mussels appeared within the normal range.

Signed:

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

Date: 09/06/2020

FHI 059, Version 12		Issued by: FHI	Date of issue: 08/10/2018
Case No: 2020-0184			Date of visit: 14/05/2020
Time spent on site:	/A	Main Inspecto	or:
Site No: FS0015 Business No: FB0119	Site Name: Business Name:	Loch Greshornish Mowi Scotland Ltd	
Case Types: 1 PSI 2	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: HI	Water type: S	CoGP MA M-24
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	If yes, see additional infor	rmation/clinical score sheet. rmation/clinical score sheet. rmation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit deta	ail reason below:	

Reported mortalities; 23/03/2020-29/03/2020, 1.23%; Yersinia and PD related mortality 7240 morts;

Antibiotic treatment finished 28th March; Site Inspected 10/3/2020 (AFH-2020-0116) diagnostic samples taken. Duty Inspector spoke to operator following the report of increased mortality and noted that mortality had reduced the following week.

20/04/2020-26/04/2020 ,1.26%; Post treatment, physical damage 7027 morts;

"Lice treatment finishes this week, the morts are expected to drop off during next week". Site Inspected 10/3/2020 (AFH-2020-0116) diagnostic samples taken. FHI to monitor mortality levels, should they remain above 1% in following week, PSI to be carried out.

27/04/2020-03/05/2020,1.58%; Increased mortality due to acute treatment losses and physical damage, recently treated sealice and CMS positive 7637 morts;

"Lice treatments finished this week, the morts should be dropping off during this week". FHI visited in March 2020, (AFH-2020-0116) diagnostic samples were taken. FHI to monitor and PSI to be carried out.

Morts for last full week; 4/5 534, 5/5 576, 6/5 327, 7/5 355, 8/5 430, 9/5 371, 10/5 296. Total 2889 - 0.6% attributed to CMS.

Current mortality around 240-300 per day but spike yesterday of 460/day/site. Site is harvesting the large grade fish above 4 kg both live and dead haul via Mallaig.

Health team have been on site twice in the last month. Observing burst heart cavities and internal haemorrhaging. Positive test results for CMS, HSMI, PD, Yersinia, moritella. Lesions observed during FHI visit have improved.

Recent salmosan tarp treatment, No mechanical treatments planed due to CMS. Reported 60% lice clearance and average adult female lice currently 3.05. Planning a further tarp treatment.

With presence of CMS and requirement to treat lice it is thought that the mortality levels may continue to be above the 1% reporting threshold.

PSI case completed due to COVID 19 situation preventing a site inspection.

FHI 059, Version 12		Issued by: FHI			Date o	of issue	: 08/10/2018
Case Number:	2020-0184		Site No:	FS0015		Insp:	
Date of Visit	14/05/2020		No of m	ovements/s	supp./dest.		Score
Live fish movements			c	1-5	6-10	>10	
Movements on (from out	Frequency of m	novements on from equivalent MS	C	5	10	14	5
with GB) of susceptible species		novements on from equivalent zone o	r	9	18	26	$\overline{}$
5,5555	Number of sup	ncluding third country pliers			10	14	5
Movements off	Frequency of m		I 0		6	10	10
Movements on	Number of des				6	10	3
Exposure via water		Site contac	ts 0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or l	,	C				
susceptible to same diseases)	farms upstream	or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		1
	farms upstream	or in a coastal zone with category III n or within 1 tidal excursion	1	3	6		ш
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		ш
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	g plant discharging into adjacent water	rs	1	2		0
On farm processing within the rules of the directive	No on farm pro		C				0
	Processing own	n fish (re-cycling risk)	1				1
		from MS of equivalent status	2	!			
	equivalent statu		4				
		r from Category III farm	8	3			$\overline{}$
	Processing fish	n from Category ∨ farm	10				\Box
Disposal of fish and fish by-	Site's own was	te only processed.	C				0
products	Common proce	esses with other farms	3	3			ш
	Collection poin	t for waste from other farms	5	5			
Use of unpasteurised feeds	No feeding of u	inpasteurised feed		- 			0
	Feeding unpas	teurised feed	5	5			ш
Biosecurity		Number of site	es 1	2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	C	1	2		0
	Sites sharing s	taff and equipment	C	1	2		
Disinfection of equipment	Yes						0
between sites, use of footbaths etc	No		1				Н
CoGP/Regulator				J			
Practices in accordance	Yes						0
with regulator or industry code of practice	No		3	3			
Platform access to cages	Yes		1 (1			0
	No		2				
					Total Rank		25 MEDIUM

FHI 059, Versio	n 12			Issued by: F	HI		Date of iss	ue: 08/10/2018
Case No:	2020-0184		Site No:	FS0015				
Date of case:	14/05/2020				Inspector(s):		1	
Business/site c	ontacts correct	? (if no update	site summ	ary sheet)			Y	
		` '		,				
Site Details						_		
Total No facilitie			No facilities	stocked	12	2		
Species	Sal	lumpfish				ļ		
Age group No Fish	2019 Q1 437,000	mixed						
Mean Fish Wt	· ·	134,300 mixed			-	 	\vdash	
Next Fallow Da		July or Augus	t	Next Input D	ate (Site)	not known		
Date of last ins			10/03/2020]	(0.10)			
				ı				
Any recent incr	eased or atypic	al mortalities?					Y	
If yes, detail:			S	ee additional	info			
e.g. site average, max								
per cage								
							V	
Any increased		•	tion.)				Y	
If yes, detail:	CMS, post trea	atment						
							Whole fish -	
How are mortal	lities disposed (of?					Dundas Chemicals	
If other detail:	nics disposed (JI:					CHOIMICAIC	
Any treatments	2 (since last inc	enection)					V	
If yes, detail:	Salmosan		Γ.M.S.	1		1	<u> </u>	
Other:								
Any disease on	site? (since la	et inspection)					Y	
-	CMS, PD, HS		oritella				<u> </u>	
Has any anima		ance or diagno	ostic investi	ratione haan	carried out by			
of, the business	<u>.</u> 2	arioc or alagric		gations been	carried carry	, or on behalf	Y	
Any significant		arioe or diagric		gations been		, or on behalf	Y	
Any significant If yes, detail	results?			galloris beeri		, or on behalf	Y	
If yes, detail	results? CMS, PD, HS	MI, Yersinia, n	noritella			, or on behalf	Y	
If yes, detail Is there a histor	results? CMS, PD, HS	MI, Yersinia, n	noritella			, or on behalf	Y	
If yes, detail	results? CMS, PD, HS	MI, Yersinia, n	noritella			, or on behalf	Y	
If yes, detail Is there a histor	results? CMS, PD, HS ry of sea lice is: able to keep lice	MI, Yersinia, n sues at the site	noritella e in previou	s 4 years		, or on behalf	Y Y N	
If yes, detail Is there a histor If yes, detail:	results? CMS, PD, HS ry of sea lice is:	MI, Yersinia, n sues at the site	noritella e in previou	s 4 years		, or on behalf	Y Y N	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail:	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional	MI, Yersinia, n sues at the site e levels below info	noritella e in previou	s 4 years		, or on behalf	Y Y N N	
If yes, detail Is there a histor If yes, detail: Has site been a	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional	MI, Yersinia, n sues at the site e levels below info	noritella e in previou	s 4 years		, or on behalf	Y Y N N Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail:	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan	MI, Yersinia, no sues at the site elevels below info	noritella e in previous the recomn	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan	MI, Yersinia, no sues at the site elevels below info	noritella e in previous the recomn	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice If no, detail:	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments hav	MI, Yersinia, no sues at the site elevels below info ce in place?	noritella e in previous the recomn	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments hav	MI, Yersinia, no sues at the site elevels below info ce in place?	noritella e in previous the recomn	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice If no, detail:	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments have	MI, Yersinia, no sues at the site elevels below info ce in place?	noritella e in previous the recomn	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y Y Y Y	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice If no, detail: Is a management	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments have ent area agreen	MI, Yersinia, no sues at the site elevels below info ce in place? I ve been adminiment in place? gement area fa	the recomm	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y Y Y N N N N N N N N N N N N	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice If no, detail: Is a management	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments have ent area agreen GP Farm managescapes? (check	MI, Yersinia, no sues at the site elevels below info ce in place? I we been adminiment in place? I gement area factor to phone	the recomm	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y Y Y Y N N N N N	
If yes, detail Is there a histor If yes, detail: Has site been a If no, detail: Treatment disc If yes, detail: Where sea lice If no, detail: Is a manageme Does your CoG	results? CMS, PD, HS ry of sea lice is: able to keep lice see additional harge for sea li Salmosan treatments have ent area agreen GP Farm managescapes? (check	MI, Yersinia, no sues at the site elevels below info ce in place? I we been adminiment in place? I gement area factor to phone	the recomm	s 4 years nended lice le	evels?	, or on behalf	Y Y N N Y Y Y Y N N N N N N N N N N N N	

Any significant changes to your biosecurity procedures since previous visit?

Y

If yes, detail: now undertaking dead haul harvests as well as live haul

Case No:	2020-0184			Date of visit:	14/05/2020				
Site No:	FS0015			Inspector:					
Results Summary	Freq.			Date of Notification					
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp	
	-								
	 								
Report Summary									
Case Type	Date	Insp	2 nd Insp						
PSI	19/06/2020								
	ļ								





Mowi Scotland Ltd Stob Ban House Glen Nevis Business Park Fort William PH33 6RX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0119 SITE NO INSPECTOR

FS0015

DATE OF CASE 14/05/2020 SITE NAME Loch Greshornish

CASE NO 20200184

Passive Surveillance Inspection

A notification of mortality levels above the reporting criteria was received by the Fish Health Inspectorate for the period of 20 April to 3 May 2020. The inspectorate had visited the site on 10 March 2020 and diagnostic samples were taken (case 20200116).

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice).

Cardio myopathy syndrome (CMS) was reported as the main issue on site. An increase in lice levels resulted in a salmosan tarpaulin treatment being carried out. This treatment combined with the CMS resulted in increased mortality. The site is currently harvesting larger fish and plan to be fallow in July or August.

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

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.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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

R28



Date: 19/06/2020

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

Issued by: FHI	Date of issue: 08/10/2018							
	Date of visit: 13/05/2020							
Main Inspector:								
Grey Horse Channel Mowi Scotland Ltd								
4 5	6							
	FHI 045 completed							
Water type: S	CoGP MA W-11							
If yes, see additional inform	If yes, see additional information/clinical score sheet. 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:								
	Main Inspector: Grey Horse Channel Mowi Scotland Ltd 4 5 Water type: S If yes, see additional inform If yes, see additional inform If yes, see additional inform							

Mortality information - reported.

week 14 - 1.01% - 4566 fish @ 3.3kg- Clinical CMS

week 17 - 1.47% - 4757 fish @ 3.4kg - CMS and PD

week 18 - 2.04% 5514 fish @ 3.4kg - Losing fish due to CMS and PD, 1 pen had acute losses from treatments.

week 19 - 1.89% 4996 fish @ 3.4kg - CMS and PD - Fish being harvested out

Site to be harvested out. Starting 16/05/2020 site expected to be empty by end of may. All pens were first thinned to see if that would help mortality, still seeing consistent CMS and PD mortality so decision to harvest out site was made.

FVG did a full diagnostic which confirmed the presence of CMS and PD.

FHI 059, Version 12		Issued by: FHI			Date o	of issue	: 08/10/2018
Case Number:	2020-0188		Site No:	FS1122		Insp:	
Date of Visit	13/05/2020		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	Frequency of movements on from equivalent zone or			٥	18	26	
openes -	Number of sup	ncluding third country	0		10	26 14	0
Marray - 15							40
Movements off	Frequency of m		0		6	10 10	10
Exposure via water	Ivalliber of des	Site contacts			6-10		بـــــــــــــــــــــــــــــــــــــ
Water contacts with other	Farm is protect	red (secure water supply through					$\overline{}$
farms (holding species	disinfection or l	,	0				ш
susceptible to same diseases)		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					ш
		n or within 1 tidal excursion	1	3	6		ш
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		
Management practices	'		None	Coouro	Unacquira		
Water contacts with	Any processing	plant discharging into adjacent waters		Secure	Unsecure		
processors	7 any processing	, plant disonalying into adjacont waters	0	1	2		0
On farm processing within the rules of the directive	No on farm pro	cessing	0				$\overline{}$
the rules of the directive	Processing own	n fish (re-cycling risk)	1				1
	Processing fish	from MS of equivalent status	2				-
	Processing fish equivalent state	from zone or compartment of	4				ш
		n from Category III farm	8				-
		n from Category ∀ farm	10				-
Disposal of fish and fish by-	Site's own was	te only processed.	T 0	i			
products	Common proce	esses with other farms	3	-			3
	Collection poin	t for waste from other farms	5	-			0
Use of unpasteurised feeds	No feeding of u	innasteurised feed]			
ose of unpasteurised reeds	Feeding unpas	· ·	5				<u> </u>
Biosecurity	,gp	Number of sites			≥ 4		
Contacts with other sites	Sites operating	from single shorebase	0		2		1
	Sites sharing s	taff and equipment	0	1	2		1
Disinfection of equipment	Yes		0	1			0
between sites, use of footbaths etc	No		1				Н
CoGP/Regulator				J			
Practices in accordance	Yes		0]			0
with regulator or industry code of practice	No		3				НΪ
	Yes			1			
Platform access to cages	No		0				0
	140			J			
					Total		21
					Rank		MEDIUM

FHI 059, Versio	on 12			Issued by: F	HI		Date of iss	sue: 08/10/2018
Case No:	2020-0188		Site No:	FS1122	2			
Date of case:	13/05/2020		1		Inspector(s):]	
Business/site of	ontacts correct	? (if no updat	te site summ	ary sheet)			Y	l
Site Details			_			_		
Total No faciliti			No facilities	stocked	10			1
Species	SAL	Lumpfish						
Age group	2019 Q2's	2020			<u> </u>			
No Fish	190,556	20,000		<u> </u>				
Mean Fish Wt		40g						
Next Fallow Da	ite (Site)	End of May	2020	Next Input I	Date (Site)	March/April	2021	
Date of last ins	pection: (ECI o	r PSI)	28/03/2019	7				
Any recent incr	eased or atypic	al mortalities	? (last 4 wee	eks).			Y	
If yes, detail:			CMS and PE	0 - See additi	onal comments	3		
e.g. site								
average, max								
per cage								I
							V	
Any increased			•				Y	
If yes, detail:	CMS and PD	- See addition	nai comment	is.				I
How are morta							Other (detail)	
If other detail:	White shore c	ockles - Uist						
Any treatments	2 (since last in	enection)					Y	
If yes, detail:	Salmosan	spection)	H2O2	1	Slice	1		
Other:	Freshwater an	d Mechanica		carried out in				
				carried out ii	12019			
Any disease or		st inspection)					Y	
If yes, detail:	CMS and PD							
Has any anima	l health surveill	ance or diad	nostic investi	nations been	carried out by	or on hehalf	V	
of, the busines		arioc or diagi	10500 1114050	gations been	carried out by,	or on bendin		I
Any significant							Y	
If yes, detail		ed full health	report - end	of April CMS	and PD confirm	ned		
Is there a histo	ry of sea lice is:	sues at the s	te in previou	s 4 years			IN	
If yes, detail:								I
Has site been a	able to keep lice	e levels belov	v the recomn	mended lice le	evels?		Y	
If no, detail:								
-							V	
Treatment disc		ce in place?	0-1	٦	LIDOD	1	T	
If yes, detail:	Slice	l	Salmosan	J	H2O2	ı		I
Where sea lice	treatments hav	ve been admi	inistered hav	e they had a	n effect?		Y	
If no, detail:	Good clearand			•				
Is a manageme							Y	
Does your Co				chrony2				
Does your Coo	ı amımanaç	gement area	ianow iii Syfic	Cilionly:				
Any reported e	scapes? (check	prior to pho	ne call)				N	
Any escapes?	(since last inspe	ection)					N	
If yes, detail:								
(include date)								

FHI 059, Version 12 Issued by: FHI Date of issue: 08/10/2018

Any significant changes to your biosecurity procedures since previous visit?

Yes - Due to Covid-19 outbreak.

Case No:	2020-0188			Date of visit:	13/05/2020			
Site No:	FS1122			Inspector:		l		
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					
PSI	21/05/2020		2 11130					





Mowi Scotland Ltd Stob Ban House Glen Nevis Business Park Fort William PH33 6RX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO FB0119 **DATE OF CASE** 13/05/2020

SITE NO FS1122 SITE NAME Grey Horse Channel

INSPECTOR CASE NO 20200188

Passive Surveillance Inspection

Notifications of mortality levels above the reporting criteria were received by the Fish Health Inspectorate for the period of 20/04/2020 to 10/05/2020.

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice).

Weekly mortalities above 1% have been attributed to CMS and PD. The fish on site are at harvest weight so the operator has decided to harvest out the site. The site is expected to be fallow by the 31st of May 2020.

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

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.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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 www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter

Date: 21/05/2020

FHI 059, Version 12		Issued by: FHI	Date of issue: 08/10/2018
Case No: 2020-0193			Date of visit: 14/05/2020
Time spent on site:		Main Ins	spector:
Site No: FS0646 Business No: FB0119	Site Name: Business Name:	Soay Mowi Scotland Ltd	
Case Types: 1 PSI 2	3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: WI	Water type: S	CoGP MA W-7
Dead/weak/abnormally behaving to Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	If yes, see additiona	al information/clinical score sheet. al information/clinical score sheet. al information/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit deta	ail reason below:	

Mortality information - Reported.

MRT01598 -week 14 - 1.95% 11198 fish @ 3kg Acute morets and physical damage due to thermolicer.

MRT01627 -week 18 - 1.14% 5657 fish @ 3.3kg Acute treatment losses Cleanerfish Mortality - wk19- 1891, wk18 - 2441, wk17 - 1236, wk16-1059

Last salmosan treatment - end of April 7 pens treated.

Alphamax treatment used for Caligus settlement last year

Thermolicer treatments also used to keep lice under control, with freshwater treatments used in 2019.

Full site treatments - Salmosan starting 14/05/2019 - Pre-adult settlement. Site manager expects to see a small spike in mortality due to CMS and PD confirmed on site.

mortality spike in week 18 attributed to treatment loss in one pen. Large fish with CMS, didn't take well to salmosan treatment. Pen number 2. Mortality returned to normal the following week.

FHI 059, Version 12		Issued by: FHI			Date o	t issue	e: 08/10/2018
Case Number:	2020-0193		Site No:	FS0646		lnsp:	
Date of Visit	14/05/2020		No of m	ovements/s	supp./dest.		Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out		novements on from equivalent MS	0	5	10	14	0
with GB) of susceptible species		novements on from equivalent zone or ncluding third country	0	9	18	26	0
	Number of sup		0			14	0
Movements off	Frequency of n	novements off	0	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 upstrean	or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		0
	farms upstrean	or in a coastal zone with category III or within 1 tidal excursion	1	3	6		0
		or in a coastal zone with category V 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
	Processing own	n fish (re-cycling risk)	1				
	Processing fish	from MS of equivalent status	2				
	Processing fish equivalent state	n from zone or compartment of us	4				
	Processing fish	n from Category III farm	8				
	Processing fish	n from Category ∨ farm	10				
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				0
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	I 0	1			0
	Feeding unpas	•	5				ш
Biosecurity		Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	0	1	2		0
	Sites sharing s	taff and equipment	0	1	2		0
Disinfection of equipment	Yes		0				
between sites, use of footbaths etc	No		1				
CoGP/Regulator							
Practices in accordance with regulator or industry	Yes		0				0
code of practice	No		3				
Platform access to cages	Yes		0	1			0
	No		2	1			
					Total Rank		13 LOW

FHI 059, Version	n 12			Issued by: F	HI		Date of is:	sue: 08/10/2018
Case No:	2020-0193		Site No:	FS0646	ô			
Date of case:	14/05/2020		1		Inspector(s):		1	
Business/site of		? (if no upda	■ te site summ	nary sheet)	. ,		Y	
		(II 110 apaa		,,				
Site Details								
Total No faciliti	es	16	No facilities	stocked	16			
Species	SAL	Lumpfish						
Age group	2019 Q2's	2019						
No Fish	491,064	61,667						
Mean Fish Wt		30g						
Next Fallow Da	ite (Site)	July 2020		Next Input	Date (Site)	march 2021		
Date of last ins	pection: (ECI o	r PSI)	08/11/2019	Ð				
Any recent incr	eased or atunio	al mortalities	2 (last 4 wee	ake)			V	1
If yes, detail:			-		17- 2292 Fish, V	NK16- 25/10 I	- Fieh	
e.g. site	VVK	10 - 10/0 113	511, VVK 10 - 50	007 H3H, VVK	17-2252 1 1311, V	VICTO- 2545 I	1311	
average, max								
per cage								
							- V	•
Any increased			-	0 100			Y	
If yes, detail:	Post treatmen	t mortality- re	elated to CM	S and PD				
							Ensiled - on	
How are morta							site	
If other detail:	White shore c	ockles if too	many morts	for ensiler				
Any treatments	? (since last in	spection)					Y	
If yes, detail:	Salmosan	1	Slice	٦	Alphamax	1		
Other:	Mechanical ar	nd freshwater			, apriamax			
Amy diagona an								
Any disease or If yes, detail:			,	M			'	
ii yes, detaii.	FD and Civis	commined. A	S WEII AS LIN	IVI				
		ance or diag	nostic investi	igations beer	carried out by,	or on behalf	Y	
of, the busines								! !
Any significant							Y	
If yes, detail	Yes - confirme	ed PD, CMS	and ERM (b)	/ fish vet gro	up)			
Is there a histo	ry of sea lice is	sues at the s	ite in previou	ıs 4 years			Y	
If yes, detail:					and treatments.			
Has site been a	able to keep lice	a levels helov	w the recomm	mended lice l	evels?			· [
If no, detail:	able to keep lice	e levels belov	w the recomi	nended lice i	evels :			
ii iio, detaii.								
Treatment disc		ce in place?		_		_	Y	
If yes, detail:	Alphamax		Salmosan]	H2O2			
Where sea lice	treatments hav	ve heen adm	inistered hav	e they had a	n effect?		Y	1
If no, detail:	Treatments na	ve been dam	iniotored ridy	re triey rida a	in chicot.			
	nt organization	nont in rise	2				V	
Is a manageme	ent area agreer	nent in place	f					
Does your CoG	SP Farm manag	gement area	fallow in syn	chrony?			N/A	
Any reported es	scapes? (check	c prior to pho	ne call)				N	
Any escapes?							N	
If yes, detail:								
(include date)								

FHI 059, Version 12 Issued by: FHI Date of issue: 08/10/2018

Any significant changes to your biosecurity procedures since previous visit?

Y

Changes due to Covid-19

Case No:	2020-0193			Date of visit:	14/05/2020			
Site No:	FS0646			Inspector:				
Results Summary	Freq.				te of Notificat			
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
	1							
Report Summary								
Case Type	Date	Insp	2 nd Insp					
PSI	14/05/2020							





Mowi Scotland Ltd Stob Ban House Glen Nevis Business Park Fort William PH33 6RX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

 BUSINESS NO
 FB0119
 DATE OF CASE
 13/05/2020

 SITE NO
 FS0646
 SITE NAME
 Soay

 INSPECTOR
 CASE NO
 20200193

Passive Surveillance Inspection

A notification of mortality levels above the reporting criteria was received by the Fish Health Inspectorate on 10/4/2020 and 08/05/2020 for the period of 30/03/2020 to 05/04/2020 and 27/04/2020 to 03/05/2020.

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice).

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

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

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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 www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter

Date: 14/05/2020

FHI 059, Version 13		Issued by: FHI	Date of issue: 12/05/2020
Case No: 2020-0194			Date of visit: 15/05/2020
Time spent on site:	1hr	Main Inspecto	or:
Site No: FS0881 Business No: FB0440	Site Name: Business Name:	Uig Grieg Seafood Shetland Ltd	
Case Types: 1 PSI	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed N
Observations:	Region: HI	Water type: S	CoGP MA: M-24
Dead/weak/abnormally behaving Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken?	ed?	If yes, see additional infor If yes, see additional infor	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
UNI/REG only - if unable to carr	y out intended visit deta	all reason below:	

MRT01540 (20/01/2020) - 20,484 (1.97% (reported), 3.86% from fishtalk) - Gill health and treatment losses.

Unreported mortality (24/02/2020) - 7,821 (1.31%) - Infection with Moritella viscosa, physical damage and poor performers. Treated with Florfenicol the following week.

MRT01630 (04/05/2020) - 9,337 (2.24%) - Treatment losses - Optilicer

Mortality last 4 weeks:

W/b 13th April - 2,101 (0.5%), attributed to physical damage from treatments in previous weeks and poor performers.

W/b 20th April - 3,580 (0.84%), attributed to physical damage and poor performers.

W/b 27th April - 1,388 (0.33%), attributed to poor performers.

W/b 4th May - 9,447 (2.27%), attributed to physical damage from optilizer treatment.

Sea lice counts over 2 since last inspection:

Wk5 2020: 2.24 Wk6: 3.76

Wk7: 3.94 Wk8: 4.32

Wk9: Freshwater treatment conducted over a 3 week period.

Wk11: Fish were moved off to Loch Snizort East (FS1309) so no count conducted.

Wk12: 5.93

Wk13: Began H2O2 treatment, reduced lice load to 4.45 Wk14: Ongoing H2O2 treatment reduced lice load to 3.28

Wk15: 3.83

Wk16: 3.9 Optilicer arrived at Loch Snizort FS1309 (neighbouring site)

Wk17: 4.57

Wk18: 5.73 Optilicer arrived at Uig.

Wk19: Optilicer treatment began and lice counts dropped to 2.94.

Site manager reported that they had since come down further this week.

PSI conducted due to current COVID-19 lockdown restrictions preventing a site inspection.

FHI 059, Versi	on 13		Issued	by: FHI		Date of iss	sue: 12/05/2020
Case No:	2020-0194]	Site No:	FS0881]		
Date of case:	15/05/2020]		Inspector(s):		
Registration/	Authorisation D	etails					
Business/site	contacts correct?	(if no update si	te summary shee	et)			N
Site Details							
Total No facilit	ies	8	No facilities sto	cked	6		
Species	SAL						
Age group	19 S1						
No Fish	405,900						
Mean Fish Wt		October 2020		Novt Input Date	(Sito)	Spring 2021	
Next Fallow D	ale (Sile)	October 2020		Next Input Date	e (Site)	Spring 2021	
Date of last in	spection: (ECI or	PSI)	16/10/2019				
Mortality Info	rmation						
_	ncreased or atyp	ical mortalities?	(last 4 weeks).				Y
If yes, detail:			,	buted to physica	al damage from	optilicer treatmer	nt.
2. Any increas	ed mortalities? (s	•	ction.)				Y
If yes, detail:	See additional						
	rtalities disposed				Other (detail)		
If other detail:	Fish go off who	le from Dunveg	an, SSE Barkip,	Dalrigh, KA24 4	JJ.		
Treatments a	nd Medicines						
	ents? (since last i	nspection)		_			Y
If yes, detail:	T.M.S.		Florfenicol		H2O2		
Other:							
Health status	and Results of	Surveillance					
1. Any disease	on site? (since l	ast inspection)					Y
If yes, detail:	Low levels of A						
 Has any ani Any significant 	mal health surve	illance been car	ried out by, or or	behalf of, the b	ousiness?		Y
o. 7 my orgrimos		e beginning of M	farch, report con	firmed presence	e of AGD and Po	GD. Vets were or	n site
If yes, detail			p (site manager				
Sea lice			41				N
If yes, detail:	experienced sea	ilice problems i	n the previous 4	years?			14
•	vels stayed below	w the suggested	critoria for treatr	ment in the CoG	D since the last	inepaction?	N
If no, detail:	See additional		Criteria for treati	Herit in the Coc	or since the last	inspection:	
	ge adult female s		onis) numbers pe	er fish been at a	level of 3 or abo	ove (prior to w/b	Y
	or above (from w/	•				(10.10.10.11.2)	
4. If yes to 3, h	nave these been	reported to the I	Fish Health Inspe	ectorate? If no, s	see comment.		
	e have treatmen	•	•				Y
If yes, detail:	Slice						
	eutic treatments	or the actions to	aken had a signif	ficant impact up	on the lice levels	recorded?	Y
If no, detail:							
	gned documente		ment agreement	or statement re	levant to the site	and CoGP	Y
	ment Area (or eq P Farm Managem		uivalent) fallowe	d synchronous	v on a single vea	ar class basis?	Y
		(0, 34			,		

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Escapes/Containment		
1. Any reported escapes? (check prior to phone call)		Y

Escapes/Containment	
1. Any reported escapes? (check prior to phone call)	Y
2. Any escapes? (since last inspection)	N
If yes, detail:	
(include date)	
Biosecurity Records	
1. Any significant changes to your biosecurity procedures since previous visit?	N
If yes, detail:	

FHI 059, Version 13		Issued by: FHI			Date of	of issue	: 12/05/2020
Case Number:	2020-0194		Site No:	FS0881		Insp:	
Date of Visit	15/05/2020		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	C	5	10	14	0
with GB) of susceptible species		novements on from equivalent zone of acluding third country		9	18	26	0
	Number of supp	•	C			14	5
Movements off	Frequency of m			3	6	10	10
Wovernonie on	Number of dest		C		6	10	3
Exposure via water		Site contact	ts 0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or b	•	C				
susceptible to same diseases)	farms upstream	or in a coastal zone with category I or within 1 tidal excursion	1	2	4		2
	farms upstream	or in a coastal zone with category III or within 1 tidal excursion	1	3	6		
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	plant discharging into adjacent water	rs C	1	2		0
On farm processing within the rules of the directive	No on farm pro-		С				0
	Processing owr	n fish (re-cycling risk)	1				
		from MS of equivalent status	2				
	Processing fish equivalent statu	from zone or compartment of	4				
		from Category III farm	8				
	Processing fish	from Category V farm	10	4			
Disposal of fish and fish by-	Site's own wast	e only processed.	C				
products	Common proce	sses with other farms	3				3
	Collection point	for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	npasteurised feed	C	1			0
	Feeding unpast	teurised feed	5				
Biosecurity		Number of site	s 1	2 or 3	≥ 4		
Contacts with other sites		from single shorebase	C	1	2		1
	Sites sharing st	aff and equipment	C	1	2		1
Disinfection of equipment	Yes		C				0
between sites, use of footbaths etc	No		1				
CoGP/Regulator							
Practices in accordance	Yes		C				0
with regulator or industry code of practice	No		3				
Platform access to cages	Yes		C				0
	No		2				
					Total		25
					Rank		MEDIUM

Case No: 2020-0194 Site No: FS0881 Date of visit: 15/05/2020

Start date:	End date: (if applicable)	Size of fish:	Average weight of affected population:	Species:	Yearclass (SW SAL only):	Timescale	Mortality rate recorded(%):	Explained/ unexplained:	If explained, select reason(s):
24/02/20	01/03/2020	≥750g	1.5kg	SAL	S1	Weekly	1.31	Explained	Physical damage, Winter ulcers

If unexplained, select observations:	Total mortality during event (if available):		Action taken by FHI (include case no where applicable):	Yearclass Year
	7,821	Course of Florfenicol administered following week and mortality levels dropped to below 1.	Picked up during PSI. Historic event - No further action.	2019

Case No:	2020-0194			Date of visit:	15/05/2020					
Site No:	FS0881]	Inspector:							
Results Summary	Freq.		Date of Notification							
,		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
	1									
			-							
			-							
	1									
				1						
Report Summary			nd							
Case Type	Date	Insp	2 nd Insp							
PSI	18/05/2020									
	+									





Grieg Seafood Shetland Ltd Gremista Lerwick Shetland ZE1 OPX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO FB0440 SITE NO FS0881 INSPECTOR
 DATE OF CASE
 15/05/2020

 SITE NAME
 Uig

 CASE NO
 20200194

Passive Surveillance Inspection

A notification of mortality levels above the reporting criteria was received by the Fish Health Inspectorate on 19/02/2020 and 12/05/2020 for the period of 20/02/2020 to 26/01/2020 and 04/05/2020 to 10/05/2020 respectively.

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice). The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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.

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

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

Signed:

Date: 18/05/2020

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
R26

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

Tel - 0131 244 3498 Email - ms.fishhealth@gov.scot

Website - https://www.gov.scot/policies/fish-health-inspectorate/

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2020-0198		Date of visit: 15/05/2020
Time spent on site:	Main In:	spector:
Site No: FS1309 Site Na Business No: FB0440 Busine	ame: Loch Snizort East ess Name: Grieg Seafood Shetland	Ltd
Case Types: 1 PSI 2	3 4 5	6
Water Temp (°C): Therm	nometer No:	FHI 045 completed N
Observations: Region	n: HI Water type: S	CoGP MA: M-24
Dead/weak/abnormally behaving fish pres Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken?	If yes, see additiona	al information/clinical score sheet. al information/clinical score sheet. al information/clinical score sheet.
UNI/REG only - if unable to carry out inter	nded visit detail reason below:	

MRT01628 (04/05/2020) - 11,820 (2.23%) - Treatment losses

Mortality last 4 weeks:

13th April - 835 (0.15%) - attributed to physical damage from previous treatments and poor performers.

20th April - 1,362 (0.25%) - attributed to physical damage from previous treatments and poor performers.

27th April - 1,477 (0.28%) - attributed to physical damage from optilicer and poor performers.

4th May - 11,820 (2.23%) - attributed to physical damage from optilicer.

Sea lice counts over 2 since last inspection:

Wk10: 4.8 - Fish came onto site from Uig FS0881 during a freshwater treatment.

Wk11: 3.75

Wk12: No count

Wk13: 2.84 - Site began a H2O2 treatment.

Wk14: 3.45 - Ongoing H2O2 treatment.

Wk15: 3.59

Wk16: 4.51 - Optilicer arrived on site followed by a plankton bloom.

Wk17: 3.71

Wk18: 1.14 - Optilicer moved to Uig.

Wk19: 2.49 Optilicer ongoing.

Site currently using live haul for harvesting, however this is under discussion and may change in the near future to dead haul. Site recieves all fish from Uig FS0881.

PSI conducted due to current COVID-19 lockdown restrictions preventing a site inspection.

FHI 059, Version	on 13	Issue	d by: FHI		Date of is:	sue: 12/05/2020
Case No:	2020-0198	Site No:	FS1309	9		
Date of case:	15/05/2020			Inspector(s):		
_	Authorisation Details		()			N.
Business/site of	contacts correct? (if no	update site summary sh	ieet)			N
Site Details						
Total No faciliti		10 No facilities s	tocked	9		•
Species	SAL					
Age group No Fish	19 S1 510,000					
Mean Fish Wt						
Next Fallow Da		per 2020	Next Input Dat	te (Site)	Spring 2021	
	` '			(0.10)	Opining 2021	
Date of last ins	spection: (ECI or PSI)	08/11/201	17			
Mortality Info	rmation					
1. Any recent in	ncreased or atypical mo	ortalities? (last 4 weeks)				Y
If yes, detail:		h May - 11,820 (2.23%)	- attributed to ph	ysical damage fro	om optilicer.	
•	ed mortalities? (since la	ast inspection.)				N
If yes, detail:	(a l'd' a a l' a a a a a l a f0			001		
How are mo If other detail:	rtalities disposed of?	Dunisana CCE Dankin	Delrieb KADA	Other (detail)		
ii otilei detaii.	FISH go off whole from	n Dunvegan, SSE Barkip	o, Daingn, KA24	4JJ.		
Treatments a						
•	nts? (since last inspect		_		_	Y
If yes, detail:	T.M.S.	Florfenicol		Salmosan		H2O2
Other:	SLICE to begin Mond	ay 17th.				
Health status	and Results of Surve	illance				
1. Any disease	on site? (since last ins	pection)				Y
If yes, detail:	Low levels of AGD an	d PGD.				
2. Has any ani	mal health surveillance	been carried out by, or	on behalf of, the	business?		Y
Any significa						Y
If	Vets on site beginning	g of March, report confir	med presence of	AGD and PGD.	Vets were on site	e 13/05/2020
If yes, detail	for routine check up (site manager still awaitir	ng report).			
Sea lice						
	experienced sea lice p	roblems in the previous	4 years?			N
If yes, detail:						
2. Have lice lev	vels stayed below the s	uggested criteria for trea	atment in the Co(GP since the last	inspection?	N
If no, detail:	See additional commo				<u>.</u>	
		(L. salmonis) numbers	per fish been at	a level of 3 or abo	ove (prior to w/b	Y
10/6/19) or 2 o	r above (from w/b 10/6	/19) since the last inspe	ction?			
4. If yes to 3, h	ave these been reporte	ed to the Fish Health Ins	pectorate? If no,	see comment.		
5. Does the sit		arge consents relevant t	o sea lice?			Y
If yes, detail:	Salmosan	Slice				
•	eutic treatments or the	actions taken had a sign	nificant impact up	oon the lice levels	s recorded?	Y
If no, detail:						
	=	management agreeme	nt or statement re	elevant to the site	and CoGP	Y
	ment Area (or equivaler	nt)? ea (or equivalent) fallov	ved synchronous	ly on a single yes	ar class hasis?	Y
o. is the Code	Tami Management Al	ca (or equivalent) Tallov	ved synonionous	iy on a single yea	ม เดอง มองเง!	'

1. Any significant changes to your biosecurity procedures since previous visit?

If yes, detail:

FHI 059, Version 13		Issued by: FHI			Date of	of issue	: 12/05/2020
Case Number:	2020-0198		Site No:	FS1309		Insp:	
Date of Visit	15/05/2020		No of m	ovements/s	supp./dest.		Score
Live fish movements			C	1-5	6-10	>10	
Movements on (from out	Frequency of m	novements on from equivalent MS	C	5	10	14	0
with GB) of susceptible species		novements on from equivalent zone of acluding third country		9	18	26	
	Number of supp					14	0
Movements off	Frequency of m	novements off		3	6	10	10
Wovernorite on	Number of dest		C		6	10	3
Exposure via water	•	Site contact	ts 0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or b	,	С				
susceptible to same diseases)	farms upstream	or in a coastal zone with category I or within 1 tidal excursion	1	2	4		2
	farms upstream	or in a coastal zone with category III or within 1 tidal excursion	1	3	6		
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	plant discharging into adjacent water	rs C	1	2		0
On farm processing within the rules of the directive	No on farm pro		С				0
	Processing owr	n fish (re-cycling risk)	1				
		from MS of equivalent status	2				
	Processing fish equivalent statu	from zone or compartment of	4				
		from Category III farm	8				
	Processing fish	from Category V farm	10	4			
Disposal of fish and fish by-	Site's own wast	te only processed.	C				
products	Common proce	esses with other farms	3				3
	Collection point	for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	npasteurised feed	C	1			0
	Feeding unpast	teurised feed	5				
Biosecurity		Number of site	s 1	2 or 3	≥ 4		
Contacts with other sites		from single shorebase	C	1	2		1
	Sites sharing st	taff and equipment	С	1	2		1
Disinfection of equipment	Yes		C				0
between sites, use of footbaths etc	No		1				
CoGP/Regulator							
Practices in accordance with regulator or industry	Yes		C				0
code of practice	No		3				
Platform access to cages	Yes		C				0
	No		2				
					Total		20
					Rank		MEDIUM

Case No:	2020-0198			Date of visit:	15/05/2020			
Site No:	FS1309	l		Inspector:		ı		
Results Summary	Freq.			Da	te of Notifica	tion		
	· ·	Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
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	1							
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D 10								
Report Summary	D (- nd -					
Case Type	Date	Insp	2 nd Insp					
PSI	18/05/2020							
	 							
	 							
	I							





Grieg Seafood Shetland Ltd Gremista Lerwick Shetland ZE1 OPX

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0440
Site No FS1309
Inspector

DATE OF CASE 15/05/2020
SITE NAME Loch Snizort East 20200198

Passive Surveillance Inspection

A notification of mortality levels above the reporting criteria was received by the Fish Health Inspectorate on 12/05/2020 for the period of 04/05/2020 to 10/05/2020.

Due to current government advice regarding the on-going situation with COVID-19 an inspection of the site could not be conducted. A passive surveillance inspection was conducted by telephone to gather information in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC. Information was also gathered in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice).

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

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.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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

Signed:

Fish Health Inspector

Date: 18/05/2020

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

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FHI 059, Version 13	Is	sued by: FHI	Date of issue: 12/05/2020
Case No: 2020-0203			Date of visit: 18/05/2020
Time spent on site:	N/A	Main Inspecto	or:
Site No: FS0188 Business No: FB0353	Site Name: Business Name:	Yarrowford The Yarrow Fishery	
Case Types: 1 INF	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: BO	Water type: F	CoGP MA:
Dead/weak/abnormally behavin Clinical signs of disease observ Gross pathology observed? Diagnostic samples taken?	ved?	If yes, see additional infor	rmation/clinical score sheet. rmation/clinical score sheet. rmation/clinical score sheet.
UNI/REG only - if unable to care	ry out intended visit detail r	eason below:	

FVG informed of suspicion of VHS. IDN to be served.

Site visit to be completed; 150 stat test.

Case No:	2020-0203			Date of visit:	18/05/2020			
Site No:	FS0188	1		Inspector:		ı		
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
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							_	
Report Summary								
Case Type	Date	Insp	2 nd Insp					
Info -no report	17/06/2020							
_								

FHI 059, Version 12		Issued by: FHI	Date o	of issue: 08/10/2018			
Case No: 2020-0205			Date of visit:	19/05/2020			
Time spent on site:	hours	Mai	n Inspector:				
Site No: FS0188 Business No: FB0353	Site Name: Business Name:	Yarrowford The Yarrow Fishery					
Case Types: 1 DIA	2STS 3	4 5	6				
Water Temp (°C): 13.9	Thermometer No:	T147	FHI 045 comp	leted			
Observations:	Region: BO	Water type: F	F CoGP MA				
Dead/weak/abnormally behaving fish present? Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken? Y If yes, see additional information/clinical score sheet. Y If yes, see additional information/clinical score sheet. Y If yes, see additional information/clinical score sheet.							
UNI/REG only - if unable to carry	out intended visit deta	ail reason below:					

Information received from FVG on 18 May 2020 raising suspicion of the presence of VHS. IDN placed and stat samples to be taken.

Fish of concern are in pond A3 where there has been a rise in mortality since mid-march. The fish came from Moffat Fishery Fish Farm. The site manager noted that the weather has been variable with high temperatures (above 14 degrees) he noted that during warmer weather the fish are dying in greater numbers and mortality is reducing in lower temperatures.

Paperwork done remotely ahead of site visit by ____, Site inspection and sampling by

Affected pond runs into ponds S1 and then S2. No issues in these two ponds.

A3 fish are on a separate batch of feed (Altec coppens). Fish being given limited feed every 3 days.

FHI 059, Version 12			Issu	ed by: FHI			Date of issue	e: 08/10/2018
Case No:	2020-0205		Site No:	FS0188				
Date of Visit:		19/05/2020]		Inspector(s):			
Registration/Authornamental 1. Business/site deta 2. Changes made to	ails summary		ite representa	ative?			Y N	
Site Details								
Total No facilities		9	Facilities sto	cked	9	No facilities	s inspected	9
Species	RTR	RTR	TRO	TRO				
Age group	2018	2019	2017	2018				
No Fish	63,000	55,000	2,000	2,000				
Mean Fish Wt	900g	300g	1.5 Kg	750g				
Next Fallow Date (S	ite)	No plans		Next Input Da	te (Site)	No plans		
Recent (last 4 wks)	disease prob	lems?		Y	Any escapes	(since last)	/icit\2	N
If yes, detail:		/HS, Suspecte	ed ERM		Arry escapes	(Sirice last)	/ISIL) :	IV
Movement Records		•						
Movement record		or inspection?						Y
2. Date of last inspe		inspection:					05/03/2020	
3. Are records comp		ectly entered?	,				03/03/2020	Y
4. Are movement re		•		,				Ÿ
5. Are records comp								Y
6. Are health certific		•		able?				N/A
Transport Records	;		·				'	
1. Are any movemen		it by (or on be	half) of the bu	ısiness (not usi	ng a STB)?			
If yes, is there a sys								
Mortality Records								
1. Mortality records	available for i	inspection?						Y
2. How are mortalities	es disposed d	of?			Other (detail)			
If other detail:				er fallen animal	scheme			
3. Mortality records	complete and	d correctly ente						Y
4. Recent mortality (last 4 wks):			ond A3 mort lev s; 23/4 209; 30/				ek. A3
5. Evidence of recer		atypical mortal		o, _o,oo, oo.		,	,	Y
If yes, facility nos/no		• •		/reason:				
A3- see attachment-		•	,					
6. Any other peaks i			ecked?					N
If yes, detail:								
7. Have increased (u	unexplained)	mortalities be	en reported to	vet or FHI?				Y
If yes, detail action:				to FVG, then r	reported to FH			
8. Have 'mortality ev	ents' been re	ported to FHI	? If no, add M	IRT case and e	nter on morta	lity events s	heet.	N/A

,,	Branzii, Fiorioriicoi		
	Aquatet		
	BKC		
If other, detail:	Benzocloniu m Chloride)		
	s available for inspection?		V
	blete and correctly entered?		· ·
4. Are fish in a without	•		N
5. If yes, what treatr	•		
If other, detail:	ieni(s):		
6. Are medicines sto	ored appropriately?		Y
o. Are medicines six	red appropriately:		
Biosecurity Record	as et		
•	ds available for inspection?		
2. Has the manner a	and frequency of mortality removal, recor	ding and safe disposal been considered?	
	•	cottish Ministers or veterinary professional of any	
increased (unexplai	ined) mortality at the site been included?		
		·	
		ence or suspicion of the presence of a listed disease	
	eluded and <i>how</i> and <i>when</i> that will be no		
	•	ed on the farm site been covered (equal or higher	
health status, certific	cation if required)?		
		ted between each epidemiological unit to minimise	
		isitors, equipment, live or dead fish etc.)?	
		ce to maintain the physical containment of	
aquaculture animals		antad an aita?	
If no, detail:	rity procedures been adequately implement	ented on Site?	
ii iio, detaii.			
Results of Surveill	ance		
1. Has any animal h	ealth surveillance been carried out by, or	on behalf of the business?	Y
•	available for inspection?		Y
3. Any significant re	•		Y
	letailed under recent disease problems).		
Suspected haemorr			
- Sopotica Hacillon			

5/3/20-19/5/20

Records checked between:

	11 059, VEISION 12			_				153	sueu by.	ГП			
	Case no:	2020-02	205	Site No:		FS0188			Date of Samplin		19/	05/2020	20/0
	Priority samples:	VI	Х	ВА		PA		MG		ig. HI	Х	١	
	Time sampling starts/ends:		0:00		0:00		Inspecto	or:			VMD N	o. •	0
	Environmental conditions:	1	Indoors	2		3		4		5			
	Summary samples	HIST	Υ	BA	Υ	MG	Υ	VI	Υ	PA	Υ	Total Sa	amples
A	dd Fish/Pools - click												
	Pool/Fish No	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	P1	P2
	Fish nos	1	2	3		5	6	7	8	9	10	1-5	6-10
	Pool Group	P1	P1	P1	P1	P1	P2	P2	P2	P2	P2	. •	- 10
	Species	RTR		RTR		RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR
	Average weight	130G	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g
	Sex												
	Water Type	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW
		_	>	5	>	>	>	>	_	>	ح ا	>	>
(0		hei	hei	hei	hei	hei	Fishery	hei	hei	hei	l je	hei	hei
aile		Fis.	Fis	Fis	Fis	Fis	Fis	Fis	Fis	Fis	E	Fis	Fis
Details		fat	fat	fat	fat	fat	fat	fat	fat	fat	[at	fat	fat
ock [Stock Origin	Moffat Fishery	Moffat I	Moffat Fishery	Moffat Fishery	Moffat Fishery	Moffat Fishery	Moffat Fishery	Moffat Fishery				
Sto	Facility No	A3	A3			A3	A3	A3		A3	A3		A3
0)	•												

05/2020 Additional Sample Information:

additional histo sample of thickened stomach wall F5, F9. Pool 1 and 2 part of 10 fish diag and virology sample logged as VI storage. Pools 3-30 virology logged as VI VHS. Same tissues in all 30 pools. F111-150 (P23-30) sampled by

41

Total Tests assigned 6



P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18
11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90
RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR	RTR
130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g	130g
FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW	FW
ಹಿ Moffat Fishery	င် Moffat Fishery	& Moffat Fishery	& Moffat Fishery	ಹ Moffat Fishery	& Moffat Fishery	& Moffat Fishery	& Moffat Fishery	د Moffat Fishery	& Moffat Fishery	د Moffat Fishery	& Moffat Fishery	ک Moffat Fishery	& Moffat Fishery	ک Moffat Fishery	& Moffat Fishery

FHI 059, Version 12 Issued by: FHI Date of issue: 08/10/2018 Method of killing: Anaesthetic Case no: FS0188 2020-0205 Site No: Inspector(s): Date of visit: 19/05/2020 Sheet Relevant: Y S for strong presence: M for medium presence: W for weak presence Time sampled after death (if > 45 minutes) External Signs Behaviour Moribund Lethargic Hanging vertical Spiralling Flashing Loss of equilibrium Body Dark Distended abdomen Scale Oedema Opercula Shortened Flared Haemorrhaging Throat Ventrum Base of fins Elsewhere Eyes Exophthalmic Enophthalmic (sunken) Cataract Haemorrhagic Gills Pale Zoned Necrotic Lesions Flank S Elsewhere Vent Inflamed Trailing faeces Lice Load Estimate numbers Internal Signs Clear Ascites 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 M 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

Case no: 2020-0205

Date of visit: 19/05/2020

S for strong presen Fish Number	ce: M for medium presence: W fo	or w 126	_	_			
	er death (if > 45 minutes)	120					
External Signs	er death (ii > 45 minutes)						
Behaviour							
Dellavioui	Moribund Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
	Distended abdomen						
	Anorexic						
	Scale Oedema						
Opercula	Shortened						
	Flared						
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
	Elsewhere						
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
0.11	Haemorrhagic					_	
Gills	Pale						
	Zoned						
Lastana	Necrotic	S					
Lesions	Flank	3					
Mand	Elsewhere						
Vent	Inflamed						
Line Lond	Trailing faeces						
Lice Load	Estimate numbers						
Internal Signs							
Ascites	Clear						
Ascites	Bloody						
Oedema	In tissues						
Heart	Pale/anaemic						
	Granulomas						
	Deformed						
Liver	Petechial haem						
	Gross haem						
	Tissue breakdown						
	Enlarged						
	Colour number(s)	6					
	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						
Vi de au	Fluid filled						
Kidney	Swollen						
	Grey						
	Granular						
Conorol	Liquefied						
General	Parasites present Anaemia						
	Milacillia						

FHI 059, Version 12	Issued by: FHI	Date of issue: 08/10/2018
Additional comments:		
	ish. F1- F110 killed with MS222 and sampled by	. F111-F150 killed by
liver, extended stomach (stones) , inflar Saprilegia like lesion on head. F6 -smal stones F8 -very pale internally, brown liv	ellow gelinous substance in stomach, pale mottl ned hind gut. F4 -Saprolenia like lesions, tail m I liver, toughend stomach. F7 -small liver, mottl ver, hard thickened stomach. F9 -hard stomach ach with stones, inflamed hind gut, small liver.	issing. F5 -extended stomach ed. Stomach destended with n. F10 -saprolegnia like lesions

Site No: FS0188

Case No: 2020-0205

Nature of non-compliance:
Action taken (FHI):

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

Case No:	2020-0205	Date of visit: 19/05/2020										
Site No:	FS0188	FS0188 Inspector:										
Results Summary	Freq.	Date of Notification										
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp				
VHS - MG	0/30	22/05/2020		22/05/2020								
IPN, SAV,IHN	0/3	22/05/2020		22/05/2020								
LPAT	7/11	02/06/2020		03/06/2020								
KPAT	9/11	02/06/2020		03/06/2020								
MPAT	4/11	02/06/2020		03/06/2020								
SAPR	2/11	02/06/2020		03/06/2020								
AERO	7/11	04/06/2020		03/06/2020								
PSFL	2/11	04/06/2020		03/06/2020								
GSAL	0/11	04/06/2020		03/06/2020								
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Note - attachments file must be saved to ARC folder as PDF with correct name format e.g. 2012-0123-attach or 2012-0123-attach2 etc.





The Yarrow Fishery Yarrow Selkirk TD7 5JZ

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business NoFB0353Date of Visit20/05/2020Site NoFS0188Site NameYarrowfordInspectorCase No20200205

Section 1: Summary

Yarrowford was inspected following a notification of the suspicion of the presence of viral haemorrhagic septicaemia virus (VHSV). Movement restrictions were placed at the site and samples were collected to either confirm or rule out the presence of the disease. Ten moribund fish were removed for diagnostic purposes.

Histopathology examination revealed mixed pathology. Some fish showed a mild dermatitis and myositis associated with the presence of oomycetes (likely *Saprolegnia*), mild to moderate diffuse, chronic, hepatitis and nephrosis.

An Aeromonas sp. and Pseudomonas fluorescens were identified. The level and purity of growth would not suggest these bacteria are the primary source of morbidity. Fish 10 had a more significant presence of Aeromonas sp. which may have contributed to health issues in that individual, however, overall the level and purity of growth would not suggest these bacteria would be implicated in fish morbidity.

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 fish health inspectorate (FHI) received information from the Fish Vet Group (FVG) on 18 May 2020 raising suspicion of the presence of VHSV at Yarrowford. An initial designation notice was placed on the site. The site manager reported that pond A3 had been experiencing increased mortality levels since mid-March.

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB Tel - 0131 244 3498 Fax - 0131 244 0944 Email - ms.fishhealth@gov.scot Website - www.gov.scot/Topics/marine/science The site was stocked with 63,000 rainbow trout (2018) at an average weight of 900g, 55,000 rainbow trout (2019) at an average weight of 300g, 2,000 brown trout (2017) at an average weight of 1.5 Kg, and 2,000 brown trout (2018) at an average weight of 750g.

We were informed that the weather had been variable with temperatures peaking at about 14 degrees centigrade. During warmer weather the fish were dying in greater numbers and mortality was reducing in periods of lower temperatures. The affected pond, A3, runs into ponds S1 and then S2 where no issues have been noted.

On inspection of the ponds 10 moribund fish, four of which were dark in colour, were observed in pond A3. These fish were removed for diagnostic examination. In addition a further 140 fish were removed from A3 and other ponds across the site for statutory sampling purposes. A separate report has been issued with results from these statutory tests. Fish 126 exhibited flank lesions resembling red mark syndrome. This fish was also included in the diagnostic examination.

Externally fish 1-5 and 8-10 displayed pale gills. Fish 4 and 126 had flank lesions. Fish 5 and 10 had lesions on the head. Fish 10 also had lesions on the ventral surface and fish 4 was missing the caudal fin.

Internally fish 1-3 and 7 had pale mottled livers and fish 2-3 and 6-7 had small livers. Many had extended stomachs (F3, F5, F7) and stones were observed in the stomachs of fish 3,7 and 10. Fish 3 and 10 had inflamed hind guts. Fish 4 and 5 had enlarged spleens. Petechial haemorrhaging of the pyloric caeca was observed in fish 7.

Samples

Samples from 11 fish were collected for diagnostic examination according to the table below:

Fish number	Pool number	Facility number	Species	Stage	Origin
F1-10	P1-2	А3	Oncorhynchus mykiss	130g	Moffat Fishery
F126	P26	C4	Oncorhynchus mykiss	1kg	Northern Trout

Results

Bacteriology: Kidney, spleen and lesion material from fish 1-10 and 126 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- Aeromonas sp.: F4 & 10 (kidney, spleen), F6 & 9 (spleen), F7 (kidney), 9 (spleen) & F5 & 126 (lesion)
- Pseudomonas fluorescens: F7 (spleen) & F10 (spleen & 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).

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

Parasitology: Fins were collected from fish 1-10 and 126 to determine the presence of *Gyrodactylus salaris* using light microscopy.

R09

No *G. salaris* parasites were detected in the samples examined.

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen, kidney and brain were taken from fish 1–10 and 126. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

<u>Gill</u>: Few foci of lamellar epithelial hyperplasia and haemorrhage (F2, F126), increase number of eosinophilic granular cells (EGC) at the centre of the gill filament (F5), some inflammatory cell infiltration at the tip of the gill filament (F10), free blood among gill filament (F2, F126), lamellar congestion noted in F2 & F7, and generalized epithelial lifting noted in F3 (likely post-mortem artefact).

<u>Skin & Muscle:</u> lesion: absence of epidermal layer (F4 & F5), skeletal muscle necrosis and structures resembling hyphae were present in association with muscle fibres (F4, F10). F5 displayed dermal oedema and mild inflammatory cell infiltration. F126 exhibited partial absence of the epidermal layer and congestion of the outer layer of the dermis.

<u>Heart</u>: Focal area of haemorrhage (F3) and inflammatory cell infiltration (F6) noted in the compact layer. F2: Almost no ventricle; F5: heart not in section; F7: no atrium in section.

Gut and pyloric caeca: Mild haemorrhage of the abdominal adipose tissue (F7, F10).

Pancreas: Within normal range.

<u>Liver</u>: Multifocal inflammatory cell infiltration, pericellular fibrosis and mild to moderate cuffing (F1 F2, F3, F7, F8, F9, F126). F3 displayed three multinuclear giant cells. Some fish exhibited regenerative tissue (F1, F3), mild diffuse hepatocyte vacuolation (macrovesicles) (F1, F2, F7) and some sinusoidal congestion also noted in F1 & F2 and F9 displayed evidences of erythrophagocytosis.

<u>Kidney</u>: Several renal tubule displayed hyaline droplets (F2, F3, F4, F5, F8, F10, F126) and epithelial vacuolation (F3, F7, F9). F3 exhibited a focus of hematopoietic tissue disarray and F7, F9 & F126 displayed congestion on the hematopoietic tissue.

Spleen: Congested (F1-F8, F9, F126).

Brain: Within normal range (F1).

Signed:

Fish Health Inspector

Date: 04/06/2020

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

R09





The Yarrow Fishery Yarrow Selkirk TD7 5JZ

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business NoFB0353Date of Visit20/05/2020Site NoFS0188Site NameYarrowfordInspectorCase No20200205

Statutory test

Following notification of the suspicion if the presence of viral haemorrhagic septicaemia virus (VHSV) at Yarrowford movement restrictions were placed at the site. A site visit was conducted to take samples to either confirm or rule out the presence of the disease.

All epidemiological units were inspected. Approximately 10 moribund fish were observed in pond A3 and theses were removed to be included as part of the samples. Samples were also taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

Samples

150 rainbow trout were tested for the presence of VHSV. Samples were collected according to the table below:

Fish number	Pool number	Facility number	Stage	Origin
1-110	1-22	А3	130g	Moffat Fishery
111-115	23	S2	1 Kg	Northern Trout
116-120	24	S1	1 Kg	Northern Trout
121-125	25	D1, D2	100g	Dunsop Bridge
126-130	26	C4	1 Kg	Northern Trout
131-135	27	C3	2.5 Kg	Northern Trout
136-140	28	C1	1.9 Kg	Northern Trout

141-145	29	C2T	500g	Northern Trout
146-150	30	C2B	2 Kg	Northern Trout

Results 8 1

Molecular genetics: Tissue samples were tested for segments of RNA indicative of the presence of VHSV using real-time PCR (QPCR).

The result of this test was negative.

<u>Appraisal</u>

The test for VHSV was negative. As the test was negative, the movement restrictions in force have been withdrawn. Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:

Fish Health Inspector

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

Date: 04/06/2020

Apr-20	Mortality in pond A3
2 3 4 5 6 7 8 9 10 11 12 13	5 10 15 20 25 22 20 21 21 20 18 15 20
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 May-20 1	21 22 12 25 14 14 20 15 26 28 30 35 35 40 30 20
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	40 50 60 50 70 80 50 40 30 40 50 40 30 40 50 40 15 15





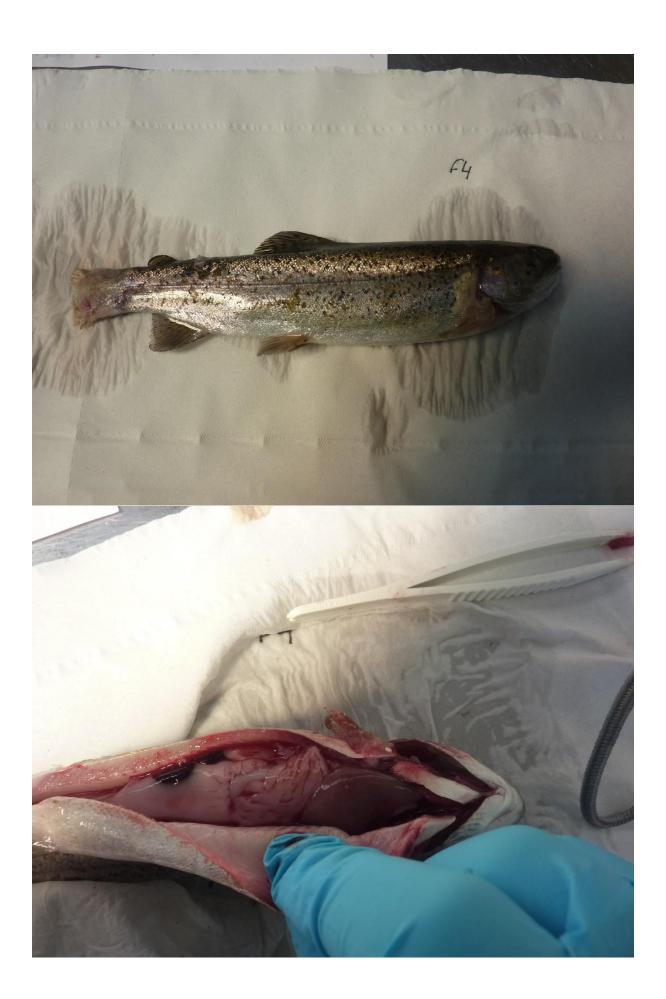


















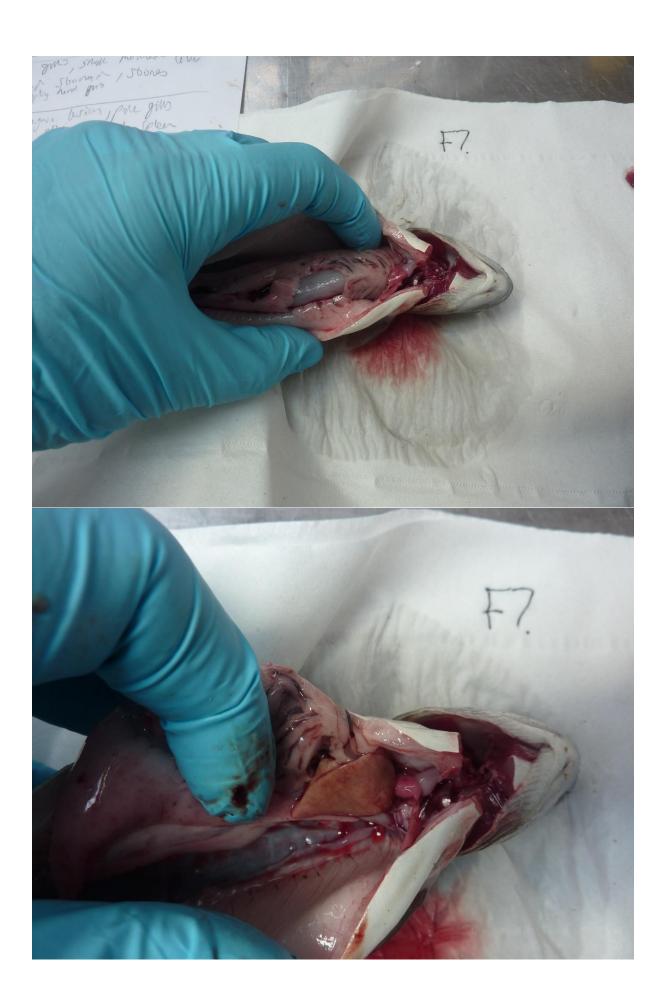
















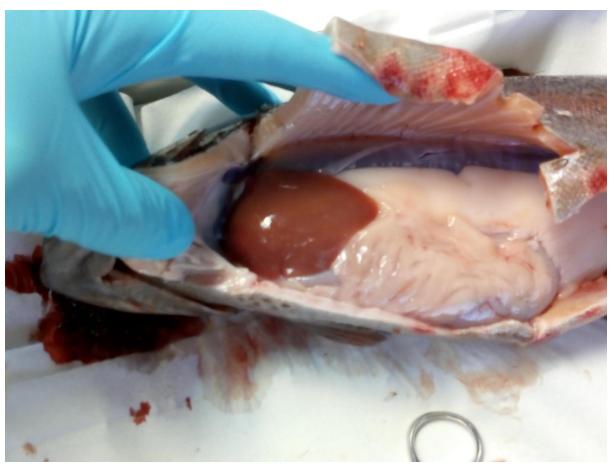






Figure 1 - Fish 126







FHI 059, Version 12		Issued by: FHI	Date of issue: 08/10/2018
Case No: 2020-0215			Date of visit: 29/05/2020
Time spent on site:	80mins	Main Inspec	etor:
Site No: SS0065 Business No: SB0043	Site Name: Business Name:	Loch Spelve Douglas Wilson	
Case Types: 1 PSI	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: ST	Water type: S	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	-	If yes, see additional info	ormation/clinical score sheet. ormation/clinical score sheet. ormation/clinical score sheet.
UNI/REG only - if unable to carry	y out intended visit deta	il reason below:	

Additional Case Information:

Water samples taken regularly to check for toxin causing algae and for spat (this time of year only). Samples taken twice a week in summer and once a week in winter.

A few mortalities last year during summer. Unsure of the cause, possibly bad weather Business correspondent spoken to over the phone. Site contact unavailable

Market currently is very poor. Mainly due to COVID-19 crisis, but is was also poor before lockdown

Date of issue: 08/10/2018 FHI 059, Version 12 Issued by: FHI Case Number: 2020-0215 Site No: SS0065 Date of Visit 29/05/2020 Inspector: Number of Susceptible species on site If no susceptible species present = LOW risk If susceptible species present, score for each pathogen Yes No 25 Susceptible to Bonamia ostrea (OED) 0 Susceptible to Marteilia refringens (OED, MED) 0 3 3 Susceptible to OsHV (CGI) 0 3 1 2-5 >6 Sites within a tidal excursion Site contacts Number of sites holding susceptible species within a tidal 0 excursion 0 2 10 Live shellfish movements 0 1-2 >3 Frequency of movements on from equivalent MS O 10 Movements on Frequency of movements on from equivalent zone or compartment including third country 0 10 20 0 Number of suppliers 0 5 10 0 Movements off Frequency of movements off within MSS Management 0 1 2 0 Frequency of movements off outwith MSS Management 0 0 3 6 Areas 0 Number of destinations Secure Unsecure Management (effluent (no effluent treatment) practices None treatment) Water contacts with Depuration of stock from own sites within MSS depuration facilities management area 0 2 Depuration of stock from other businesses sites within 0 2 6 MSS management area 0 Depuration of stock from sites outwith MSS management 0 8 0 area Number of sites 2 or 3 > 4 **Biosecurity** Contacts with other Sites operating from single shorebase Sites sharing staff and equipment sites Yes No

Disinfection of equipment between sites, use of footbaths etc

0

Total Risk

FHI 059, Version 12				Issued by: FH	I I	[Date of issue: 08/10/2018
Case No:	2020-0215		Site No:	SS0065			
Date of case:		29/05/2020	1		Inspector(s):		
Business/site of	contacts correct	t? (if no, upda	ite site summ	ary sheet)		Y	
Site Details			_				
Total No faciliti		35			No facili	ties stocked:	25
Species	MED	MED	MED				_
Age group	2018		2020				_
No shellfish	11 longlines	14 longlines					_
Mean fish Wt	20g	2g	<1g			Any time now	_
Next fallow dat	to (sito)	No plans		Novt in	put date (site)	(dependant on the spat fall timing)	is years
Next fallow dat	le (Sile)	140 plans		Next III	put date (Site)	spat fail tilling)	
Date of last ins	spection: (ECI o	or PSI):	14/11/2018	1			
Any recent inci	reased or atypic	cal mortalities	? (last 4 wee	ks):		N	_
If yes, detail:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(1212)	,.			
e.g. site							
average, max							
per facility							
Any increased	mortalities? (si	nce last insne	ection)			N	
If yes, detail:	Trondings: (or	noo laat mapa	, cusii)				
,,							
How are morta	lities disposed	of?				Othe	er (detail)
If other detail:	Empty musse	ls disposed o	f on the sea b	ped			
Are there any	diseases on you	ur site?				N	_
If yes, detail:							
Have you synes	wiamanal mundati	ian an aita?				V	
nave you expe	erienced predati	ion on site?				Υ	
If yes, detail:	Eidrer ducks,	and starfish.	Starfish are b	iggest proble	m but not caus	ing signifcant mor	tality
Has the site ex	perienced incre	eased or abno	ormal fouling	?		N	
If yes, detail:							
•	rved any invasi	ive species o	n your site?			N	
If yes, detail:							
Do you have a	n up to date BM	/IP and are th	nere any issu	es?		Y	
If yes, detail:	up to date biv	, und are tr	.oro arry 1000				
	of spat fall have		he last 12 mo	onths? (musse	el sites only):		
Good. Awaiting	g spat for this ye	ear					

Case No:	2020-0215			Date of visit:	29/05/2020			
Case No.	2020-0213			Date of visit.	23/03/2020			
Site No:	SS0065			Inspector:				
Results Summary	Freq.			Da	te of Notificat	tion		
Í	· ·	Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
D								
Report Summary	5 /		nd					
Case Type	Date	Insp	2 nd Insp					
PSI	03/06/2020							





Inverlussa Mussels, Inverlussa, Ardura Craignure Isle of Mull PA65 6BD

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NO SB0043 SITE NO SS0065 INSPECTOR DATE OF CASE 29/05/2020 SITE NAME Loch Spelve CASE NO 20200215

Routine surveillance frequency assessment under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was contacted in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, and to meet the requirements of European Community Council Directive 2006/88/EC.

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

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

No mortality had been observed on site since the last inspection by Marine Scotland.

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

Signed:

Fish Health Inspector

Date: 03/06/2020

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