

Case No:	<input type="text" value="2019-0614"/>	Date of visit:	<input type="text" value="29/10/2019"/>			
Time spent on site:	<input type="text" value="1hr"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="SS0874"/>	Site Name:	<input type="text" value="Garbh Lingeigh"/>			
Business No:	<input type="text" value="SB0533"/>	Business Name:	<input type="text" value="Traigh Mhor Oysters"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value=""/>	3 <input type="text" value=""/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="10.2"/>	Thermometer No:	<input type="text" value="T152"/>	FHI 045 completed	<input type="text" value="N"/>	
Observations:	Region:	WI	Water type:	S	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="N"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No mortality records maintained. However, if the site observed a higher than expected mortality (see below), this would be reported and investigated.

3-7mm >35%

7-14mm >15%

5g-25g >2-5%

25g-market size >2-5%

Site received stock from both Guernsey and Morcambe Bay in 2017. Manager is satisfied with both stocks and has had no issues with either.

Seed received next Spring (2020) is planned to be sourced from Morcambe Bay only.

SS numbers missing from movement book. Discussed with site manager who agreed to include going forward. No further action required.

Inspection and paperwork completed by [REDACTED] under [REDACTED] supervision.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="6 ratts"/>	Facilities stocked	<input type="text" value="2"/>	No facilities inspected	<input type="text" value="6"/>
Species	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>			
Age group	<input type="text" value="2019"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="400,000"/>	<input type="text" value="113,000"/>			
Mean Fish Wt	<input type="text" value="5-20g"/>	<input type="text" value="25-40g"/>			
Next Fallow Date (Site)	<input type="text" value="No plan."/>		Next Input Date (Site)	<input type="text" value="April 2020."/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/> Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/> Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any increased (unexplained) mortality at the site been included?	<input type="checkbox"/> Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/> Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/> Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/> Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/> Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/> Y
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/> N
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: 15/08/18 - 29/10/19

Case Number:	2019-0614	Site No:	SS0874
Date of Visit	29/10/2019	Inspector:	
Number of Susceptible species on site			
If no susceptible species present = LOW risk			
If susceptible species present, score for each pathogen			
		No	Yes
	Susceptible to Bonamia ostrea (OED)	0	25
	Susceptible to Marteilia refringens (OED, MED)	0	3
	Susceptible to OshV (CGI)	0	3
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
Management practices			
		None	Secure (effluent treatment)
			Unsecure (no effluent treatment)
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			Yes
	Disinfection of equipment between sites, use of footbaths etc	0	2
Total Risk			30
			HIGH

Case No: 2019-0614

Date of visit: 29/10/2019

Site No: SS0874

Inspector: [Redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECl	01/11/2019	[Redacted]	[Redacted]

██████████
Traigh Mhor Oysters
27a Eoligarry
Isle of Barra
HS9 5YD
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0533	DATE OF VISIT	29/10/2019
SITE No	SS0874	SITE NAME	Garbh Lingeigh
INSPECTOR	████████████████████	CASE No	20190614

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

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

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

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

No animal health surveillance had been carried out on behalf of the business and/or Marine Scotland since the last Marine Scotland Inspection.

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

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

Signed:

A large black rectangular redaction box covering the signature of the Fish Health Inspector.

Fish Health Inspector

Date: 07/11/2019

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
 Business No: Business Name:

Case Types: 1 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: WI Water type: S CoGP MA

- Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
- Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
- Gross pathology observed? If yes, see additional information/clinical score sheet.
- Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Site fallow. No plans to use currently, but site owner wishes to keep site active.

Inspection and paperwork completed by [REDACTED] under [REDACTED] supervision.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="1 raft"/>	Facilities stocked	<input type="text" value="0"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="N/A"/>				
Age group	<input type="text" value="N/A"/>				
No Fish	<input type="text" value="N/A"/>				
Mean Fish Wt	<input type="text" value="N/A"/>				
Next Fallow Date (Site)	<input type="text" value="Site fallow."/>	Next Input Date (Site)	<input type="text" value="No plan."/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	<input type="text"/>

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>
2. If yes, are results available for inspection?	<input type="checkbox"/>
3. Any significant results?	<input type="checkbox"/>
If yes, detail (if not detailed under recent disease problems).	<input type="text"/>
<input type="text"/>	

Records checked between:

Case Number:	2019-0615	Site No:	SS0858
Date of Visit	29/10/2019	Inspector:	
Number of Susceptible species on site			
If no susceptible species present = LOW risk			
If susceptible species present, score for each pathogen			
		No	Yes
Susceptible to Bonamia ostrea (OED)		0	25
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	3
			3
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			10
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
			10
			0
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
			2
			6
			6
			0
			0
			0
Management practices			
		None	Secure (effluent treatment)
			Unsecure (no effluent treatment)
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
			2
			6
			8
			0
			0
			0
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			2
Total Risk			22
			MEDIUM

Case No: **2019-0615** Date of visit: **29/10/2019**

Site No: **SS0858** Inspector: **[REDACTED]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
REG	01/11/2019	[REDACTED]	[REDACTED]

Traigh Mhor Oysters
27a Eoligarry
Isle of Barra
HS9 5YD

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0533	DATE OF VISIT	29/10/2019
SITE No	SS0858	SITE NAME	Loch na H-Obbe
INSPECTOR		CASE No	20190615

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

On this occasion, the site was reported to be fallow.

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

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: 07/11/2019

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

Case No:	<input type="text" value="2019-0616"/>	Date of visit:	<input type="text" value="29/10/2019"/>			
Time spent on site:	<input type="text" value="1hr"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="SS0798"/>	Site Name:	<input type="text" value="Sounds of Barra"/>			
Business No:	<input type="text" value="SB0533"/>	Business Name:	<input type="text" value="Traigh Mhor Oysters"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value=""/>	3 <input type="text" value=""/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="10.2"/>	Thermometer No:	<input type="text" value="T152"/>	FHI 045 completed	<input type="text" value="N"/>	
Observations:	Region:	WI	Water type:	S	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="N"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No mortality records routinely maintained. However, if the site observed a higher than expected mortality (see below), this would be reported and investigated.

3-7mm >35%

7-14mm >15%

5g-25g >2-5%

25g-market size >2-5%

Recent bad weather resulted in several trestles (a total of 42 bags) to sink into the sand, smothering the oysters. This has been attributed to the sudden observed rise in empty shells in the affected bags. Site manager is expecting 100% mortality in the affected bags but won't know until the site has been graded. Although empty shells were observed in these bags, no clinical signs of disease were observed, so no samples were taken.

SS numbers missing from movement book. Discussed with site manager who agreed to include going forward. No further action required.

Inspection and paperwork completed by [REDACTED] under [REDACTED] supervision.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="150"/>	Facilities stocked	<input type="text" value="150"/>	No facilities inspected	<input type="text" value="150"/>
Species	<input type="text" value="CGI"/>	<input type="text" value="CGI"/>			
Age group	<input type="text" value="2019"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="400,000"/>	<input type="text" value="20,000"/>			
Mean Fish Wt	<input type="text" value="5-20g"/>	<input type="text" value="60-70g"/>			
Next Fallow Date (Site)	<input type="text" value="No plan."/>		Next Input Date (Site)	<input type="text" value="April 2020"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?		Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?		Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?		Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?		Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?		Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?		Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?		Y
8. Have the biosecurity procedures been adequately implemented on site?		Y
If no, detail:		

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?		N
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: 19/10/16 - 29/10/19

Case Number:	2019-0616	Site No:	SS0798
Date of Visit	29/10/2019	Inspector:	
Number of Susceptible species on site			
If no susceptible species present = LOW risk			
If susceptible species present, score for each pathogen			
		No	Yes
Susceptible to Bonamia ostrea (OED)		0	25
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	3
			3
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			10
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
			10
	Frequency of movements on from equivalent zone or compartment including third country	0	10
			20
	Number of suppliers	0	5
			10
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
			2
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
			6
	Number of destinations	0	3
			6
			6
Management practices			
		None	Secure (effluent treatment)
			Unsecure (no effluent treatment)
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
			2
	Depuration of stock from other businesses sites within MSS management area	0	2
			6
	Depuration of stock from sites outwith MSS management area	0	4
			8
			0
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
			2
	Sites sharing staff and equipment	0	1
			5
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			2
Total Risk			36
			HIGH

Case No: 2019-0616

Date of visit: 29/10/2019

Site No: SS0798

Inspector: [REDACTED]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECl	05/11/2019	[REDACTED]	[REDACTED]

██████████
Traigh Mhor Oysters
27a Eoligarry
Isle of Barra
HS9 5YD
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0533	DATE OF VISIT	29/10/2019
SITE No	SS0798	SITE NAME	Sounds of Barra
INSPECTOR	████████████████████	CASE No	20190616

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

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

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

No animal health surveillance had been carried out on behalf of the business and/or Marine Scotland since the last Marine Scotland Inspection.

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

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: 07/11/2019

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
 Business No: Business Name:

Case Types: 1 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: WI Water type: S CoGP MA

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
 Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
 Gross pathology observed? If yes, see additional information/clinical score sheet.
 Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No mortality records maintained. However, if the site observed a higher than expected mortality (see below), this would be reported and investigated.

3-7mm >35%

7-14mm >15%

5g-25g >2-5%

25g-market size >2-5%

Site received stock from both Guernsey and Morcambe Bay in 2017. Manager is satisfied with both stocks and has had no issue. Seed received next Spring (2020) is planned to be sourced from Morcambe Bay only.

SS numbers missing from movement book. Discussed with site manager who agreed to include going forward. No further action required.

Inspection and paperwork completed by [REDACTED] under [REDACTED] supervision.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="230 trestles"/>	Facilities stocked	<input type="text" value="200"/>	No facilities inspected	<input type="text" value="230"/>
Species	<input type="text" value="CGI"/>				
Age group	<input type="text" value="2018"/>				
No Fish	<input type="text" value="175,000"/>				
Mean Fish Wt	<input type="text" value="30-60g"/>				
Next Fallow Date (Site)	<input type="text" value="No plan."/>	Next Input Date (Site)	<input type="text" value="April 2020."/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?		Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?		Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?		Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?		Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?		Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?		Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?		Y
8. Have the biosecurity procedures been adequately implemented on site?		Y
If no, detail:		

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?		N
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: 15/08/18 - 29/10/19

Case Number:	2019-0617	Site No:	SS0913
Date of Visit	29/10/2019	Inspector:	
Number of Susceptible species on site			
If no susceptible species present = LOW risk			
If susceptible species present, score for each pathogen			
		No	Yes
	Susceptible to Bonamia ostrea (OED)	0	25
	Susceptible to Marteilia refringens (OED, MED)	0	3
	Susceptible to OshV (CGI)	0	3
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
Management practices			
		None	Secure (effluent treatment)
			Unsecure (no effluent treatment)
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			Yes
	Disinfection of equipment between sites, use of footbaths etc	0	2
Total Risk			30
			HIGH

Case No: **2019-0617**

Date of visit: **29/10/2019**

Site No: **SS0913**

Inspector: **[REDACTED]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECl	01/11/2019	[REDACTED]	[REDACTED]

██████████
Traigh Mhor Oysters
27a Eoligarry
Isle of Barra
HS9 5YD
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0533	DATE OF VISIT	29/10/2019
SITE No	SS0913	SITE NAME	Ard Mhor
INSPECTOR	████████████████████	CASE No	20190617

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

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

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

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

No animal health surveillance had been carried out on behalf of the business and/or Marine Scotland since the last Marine Scotland Inspection.

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

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: 07/11/2019

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

Case No:	<input type="text" value="2019-0619"/>	Date of visit:	<input type="text" value="22/10/2019"/>			
Time spent on site:	<input type="text" value="5.5 hours"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="FS0413"/>	Site Name:	<input type="text" value="Camas Glas"/>			
Business No:	<input type="text" value="FB0119"/>	Business Name:	<input type="text" value="Mowi Scotland Ltd"/>			
Case Types:	1 <input type="text" value="REP"/>	2 <input type="text" value="VMD"/>	3 <input type="text" value="DIA"/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="12.3"/>	Thermometer No:	<input type="text" value="T147"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	HI	Water type:	S	CoGP MA	M-34
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="Y"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Site inspected following report of increased mortality from business.

Site split into 2 separate cage groups, cages 1-8 and cages 9-16

Cages 2, 3, 4, 5, 6, 7, and 8 worst affected by mortality in recent weeks, all 2018 Q4 stock except cage 2 which is 2019 Q1.

All those cages have been harvested out and are now fallow as of 18/10/2019, only cage 1 (2019 Q1) remains stocked in that cage group. Remaining stocked cages on site are being treated with antibiotic (Aquatet).

Several lethargic fish observed in cage 1, removed for diagnostic sampling.

Fish sampled for VMD appeared healthy.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	16		Facilities stocked	9		No facilities inspected	16	
Species	SAL	LUM	WRA					
Age group	2019 Q1	2019	2019					
No Fish	387,009	3,166	16,800					
Mean Fish Wt	1.8 kg	Mixed	Mixed					
Next Fallow Date (Site)	September 2020		Next Input Date (Site)	November 2020				

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	T.M.S., Oxytetracycline	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	T.M.S., Oxytetracycline	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).		

Positive results for *pasteurella skyensis* and CMS, recent mortality attributed to *pasteurella skyensis*

Records checked between: 25/04/2018 - 22/10/2019

Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1							
Fish nos	1	2	3	4	5	1-5	6	7	8	9			
Pool Group	P1	P1	P1	P1	P1								
Species	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL	SAL			
Average weight	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.8000	1.8000	1.8000	1.8000			
Sex	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Water Type	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW			
Stock Details		Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy	Loch Lochy			
	Stock Origin												
Facility No	1	1	1	1	1	1	9	11	14	16			

10/2019 Additional Sample Information:

BA-STORAGE - Kidney tissue in universals for pasteurella skyensis testing

6 Total Tests assigned 3

Case no: 2019-0619

Site No: FS0413

Method of killing: Percussive

Date of visit: 22/10/2019

Inspector(s):

Sheet Relevant: Y

S for strong presence: M for medium presence: W for weak presence

Fish Number		F1	F2	F3	F4	F5						
Time sampled after death (if > 45 minutes)												
External Signs												
Behaviour	Moribund											
	Lethargic	m	m	m	m	m						
	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											
	Haemorrhagic											
Gills	Pale											
	Zoned											
	Necrotic											
Lesions	Flank											
	Elsewhere											
Vent	Inflamed											
	Trailing faeces											
Lice Load	Estimate numbers		1	0	0	0	0					
Internal Signs												
Ascites	Clear			s	s	s						
	Bloody											
Oedema	In tissues											
Heart	Pale/anaemic	m	m	m	m	m						
	Granulomas											
	Deformed											
Liver	Petechial haem	w			m							
	Gross haem											
	Tissue breakdown											
	Enlarged											
	Colour number(s)		3	3	3	3	3					
	Granulomas											
	Lesions											
Pyloric caeca	Petechial haem	w	w		m	w						
	Tubules mauve											
	Lack of fat											
Spleen	Enlarged		m	m	m	s						
	Granulomas			m								
Gut	No food present											
	Yellow pseudo-faeces	s	s	s	s	s						
	External haem											
	Internal haem											
Body wall	Haemorrhaging											
Swim bladder	Haemorrhaging		m	m	m	w						
	Fluid filled											
Kidney	Swollen											
	Grey											
	Granular											
	Liquefied											
General	Parasites present											
	Anaemia											

Additional comments:

Case No: 2019-0619

Date of visit: 22/10/2019

Site No: FS0413

Inspector: [REDACTED]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
MG_IHN	0/1	01/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
MG_IPN	0/1	01/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
MG_ISA	0/1	01/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
MG_SAV	0/1	01/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
MG_VHS	0/1	01/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
BACT_VSPE	5/5	08/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
BACT_NSIG	3/5	08/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
BACT_PASS	5/5	08/11/2019	[REDACTED]	08/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_SPAT	5/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_AMGD	1/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_CGDH	3/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_EPIT	1/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_GPAT	3/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_KPAT	4/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_PMCH	5/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]
HIST_PASS	3/5	25/11/2019	[REDACTED]	25/11/2019	[REDACTED]	05/12/2019	[REDACTED]	[REDACTED]

Report Summary			
Case Type	Date	Insp	2 nd Insp
REP, VMD	01/11/2019	[REDACTED]	[REDACTED]
DIA	05/12/2019	[REDACTED]	[REDACTED]

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0119	DATE OF VISIT	22/10/2019
SITE No	FS0413	SITE NAME	Camas Glas
INSPECTOR	[REDACTED]	CASE No	20190619

Section 1: Summary

The above site was inspected following a report of increased mortality by the business. During the inspection a number of lethargic fish were observed in one cage. Five fish were removed for further examination and subsequent sampling.

Histopathology examination revealed mild multifactorial gill pathology which included the presence of amoebic cells suggestive of amoebic gill disease, occasional epitheliocystis was also observed. Mild nephritis and splenitis was noted, likely associated with the presence of bacteria suspected to be *Pasteurella skyensis*. The presence of *Pasteurella skyensis* was confirmed by bacterial isolation and molecular genetic speciation, the level and purity suggest this bacterium would be implicated in fish morbidity. *Vibrio* sp. was also identified.

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 above site was inspected following a report of increased mortality by the business. Inspection of records on site showed mortality levels of 2.58%, 10.38% and 3.44% for the previous three weeks respectively. Increased mortality was attributed to *Pasteurella skyensis*, with the majority of mortalities occurring in one of the two cage groups which make up the site. At the time of inspection, one cage remained stocked at the affected cage group, the remaining cages having been harvested out. During inspection of the site a number of lethargic fish were observed in the remaining stocked cage in the cage group where the increased mortality occurred. Five fish were removed for further examination and subsequent diagnostic sampling. No clinical signs of disease were observed in the other cage group.

R09

External examination showed no signs of clinical disease. 1 juvenile sea louse was observed on fish 1.

Internal examination showed pale hearts, pale livers and yellow pseudo faeces present in the gut in all five fish. Enlarged spleen and haemorrhaging of the swim bladder was observed in fish 2-5. The spleen of fish 3 had granulomas present. Petechial haemorrhaging of the liver (fish 1 and 4) and the pyloric caeca (fish 1, 2, 4 and 5) was noted.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-5	1	1	Atlantic salmon	2 kg 2019 Q1	Loch Lochy

Results

Bacteriology: Kidney and gill material from fish 1-5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated from fish 1-5.

- *Pasteurella skyensis* (Fish 1-5, kidney)
- *Vibrio* sp. (F1-5, gill. F3-5, kidney)

DNA sequence analysis was performed on a suspected *Pasteurella skyensis* colony. Results showed the isolate to be *Pasteurella skyensis*.

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), infectious salmon anaemia virus (ISAV), salmonid alphavirus (SAV) and viral haemorrhagic septicemia virus (VHSV).

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from fish 1-5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild multifocal interlamellar hyperplasia with occasional spaces (lacunae) (F3, F4 & F5) and occasional amoebic cells resembling *Neoparamoeba perurans* (F4). Occasional presence of basophilic epithelial inclusions (likely epitheliocystis) (F3). Scattered aneurysmal dilation/telangiectasia and lamellar thrombosis noted in all fish. Free blood among gills filaments. Generalized epithelial lifting likely associated with post-mortem artefact.

Skin & Muscle: Degeneration of single individual skeletal white fibres (F2).

R09

Heart: Mild to moderate pericarditis (all fish), focal infiltration of inflammatory cells in the compact layer of ventricle (F1) and mild infiltration of inflammatory cells at the spongy layer (F3).

Gut and pyloric caeca: Some cell sloughing (likely associated with post-mortem artefact).

Pancreas: Within normal range.

Liver: Mild multifocal hepatic necrosis (F4 & F5), some cuffing noted (F3). F5 also displayed thickness of the hepatic capsule and mild focal vasculitis observed in F1.

Kidney: Small foci of hematopoietic necrosis and presence of deposits of eosinophilic material (asteroid bodies, splendore-hoeppli material) distributed among hematopoietic tissue (F2, F3, F4). F4 also displayed few glomeruli with evidences of necrosis and some rod-shape Gram-negative bacteria (F2, F3, F5). Thickness of kidney capsule also noted

Spleen: Mild multifocal necrosis of white pulp and presence of small deposits of eosinophilic material (asteroid bodies, splendore-hoeppli material) distributed among the parenchyma (all fish). F3 also displayed thickness of the splenic capsule.

Signed:



Date: 05/12/2019

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

██████████
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 VISIT	22/10/2019
SITE No	FS0413	SITE NAME	Camas Glas
INSPECTOR	██████████	CASE No	20190619

The above site was inspected, following a report of increased mortality by the business.

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

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

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

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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

Medicine records were inspected and found to be adequately maintained.

Samples were taken to be analysed for veterinary residues.

R10

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: 01/11/2019

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



F1-F3



F4-F5



F1



F2



F3



F4



F5

Case No:	<input type="text" value="2019-0620"/>	Date of visit:	<input type="text" value="23/10/2019"/>			
Time spent on site:	<input type="text" value="3 hours"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="FS0776"/>	Site Name:	<input type="text" value="Loch nan Losghainn Mhor"/>			
Business No:	<input type="text" value="FB0134"/>	Business Name:	<input type="text" value="Kames Fish Farming Ltd"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value="CNI"/>	3 <input type="text" value=""/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="9.3"/>	Thermometer No:	<input type="text" value="T153"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	ST	Water type:	F	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="Y"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="N"/>					

UNI/REG only - if unable to carry out intended visit detail reason below:

Case No: **2019-0620** Site No: **FS0776**

Date of Visit: **23/10/2019** Inspector(s): **[Redacted]**

Registration/Authorisation Details

- 1. Business/site details summary checked by site representative? **Y**
- 2. Changes made to details? **Y**

Site Details

Total No facilities	4	Facilities stocked	4	No facilities inspected	4
Species	Atlantic salmon				
Age group	2019 S0				
No Fish	114,830				
Mean Fish Wt	104g				
Next Fallow Date (Site)	Unsure	Next Input Date (Site)	July 2020, or may fallow loch		

Recent (last 4 wks) disease problems? **N** Any escapes (since last visit)? **N**
 If yes, detail: **[Redacted]**

Movement Records

- 1. Movement records available for inspection? **Y**
- 2. Date of last inspection: **01/11/2016**
- 3. Are records complete and correctly entered? **Y**
- 4. Are movement records available for dead fish and waste? **Y**
- 5. Are records complete and correctly entered? **Y**
- 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)? **Y**
- If yes, is there a system in place for maintenance of transportation records? **Y**

Mortality Records

- 1. Mortality records available for inspection? **Y**
- 2. How are mortalities disposed of? **Ensiled - on site**
- If other detail: **Ensiled at Kames shore base**
- 3. Mortality records complete and correctly entered? **Y**
- 4. Recent mortality (last 4 wks): **Up to 40-50 fish per cage per week but often less and often single figures per day**
- 5. Evidence of recent increased/atypical mortalities? **N**
- If yes, facility nos/no mortality per facility/no stock per facility/reason:

- 6. Any other peaks in mortality during period checked? **Y**
- If yes, detail: **Peak in mortality in September following vaccination loss of 2,000 plus fish in 3 week period - attributed to handling mortalities**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? **Y**

If yes, detail action: **Veterinary visits conducted. Suggested bacterial septicaemia 19 September, suggested furunculosis - 30% mortalities with clinical signs 39 morts on 19th. Skin haemorrhages and changes in internal organs associated with bacterial septicaemia. Additional vet visits 4/10 revealed no bacterial septicaemia coinciding with lower mortalities.**

- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **N/A**

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	Oxytetracycline	
	Aquatet - started 22 Sept finished 1 October 2019. All cages for furunculosis	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	Oxytetracycline	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y
Biosecurity Records		
1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any increased (unexplained) mortality at the site been included?	<input type="checkbox"/>	Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and how and when that will be notified to Scottish Ministers?	<input type="checkbox"/>	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>	Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
If no, detail:		
Results of Surveillance		
1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).		
See detail above		
Records checked between:	Last inspection (01/11/16) to today (23/10/19)	

Additional Case Information:

Stock on site were diagnosed with Furunculosis, few mortalities and clinical signs but treated with Aquatet Sept/Oct 19. No reported problems since. Unsure of destination of stock for on-growing - exploring own sea sites as an option. Fish currently being fed a maintenance diet. Three moribund fish and two dead fish removed and examined. Of the moribund fish two exhibited signs of apparent bird predation and one as an apparent failed fish. No obvious post mortem signs of disease within the 5 fish observed.

Case Number:	2019-0620	Site No:	FS0776	Insp:		
Date of Visit	23/10/2019	No of movements/supp./dest.			Score	
Live fish movements		0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	0
	Number of suppliers	0	5	10	14	
Movements off	Frequency of movements off	0	3	6	10	3
	Number of destinations	0	3	6	10	3
Exposure via water	Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		1
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
Management practices		None	Secure	Unsecure		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				0
	Processing own fish (re-cycling risk)	1				
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				
	Common processes with other farms	3				3
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
Biosecurity	Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating from single shorebase	0	1	2		1
	Sites sharing staff and equipment	0	1	2		1
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				
	No	3				3
Platform access to cages	Yes	0				0
	No	2				
Total Rank					15	LOW

Case No: **2019-0620**

Site No: **FS0776**

Sea Lice Inspection (Seawater Sites Only)

1. Has the site experienced sea lice problems in the previous 4 years?
2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above during the period that records are inspected?
If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
11. Has any other action been taken (where applicable)?
12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
13. Are treatments, where conducted, carried out in cooperation between participating farms?
14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

1. Has the site experienced equipment damage due to predators in the current or previous production cycles?
2. Are measures in place to mitigate against the predation experienced on site? (Detail below)

Electric fences, top nets, predator nets

If other, detail below:

3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?
If Yes proceed with questions 4 – 9. If No skip to question 10
4. Have these been reported to Scottish Ministers?
5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover escapees? If yes give detail
8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)

Case No: **2019-0620** Date of visit: **23/10/2019**

Site No: **FS0776** Inspector: **[REDACTED]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECl, CNI	06/11/2019	[REDACTED]	[REDACTED]

[REDACTED]
Kames Fish Farming Ltd
Kilmelford
Oban
Argyll
PA34 4XA
[REDACTED]

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0134	DATE OF VISIT	23/10/2019
SITE No	FS0776	SITE NAME	Loch nan Losghainn Mhor
INSPECTOR	[REDACTED]	CASE No	20190620

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

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

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

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

Mortality records were inspected and found to be adequately maintained.

R04

No mortality levels exceeding the reporting criteria have been recorded since the last inspection.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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

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

Medicine records were inspected and found to be adequately maintained.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

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

On this occasion the site was found to be satisfactory.

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



Signed:

Date: 6 November 2019

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

Case No: 2019-0621 Date of visit: 22/10/2019

Time spent on site: 4 hours Main Inspector:

Site No: SS0759 Site Name: Fearna
Business No: SB0530 Business Name: Loch Striven Mussel Farms Ltd

Case Types: 1 MOV 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 fish present? N If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.
Gross pathology observed? N If yes, see additional information/clinical score sheet.
Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No observed mortality on site.

15 bags (18 Tonnes) of mussels brought ashore for inspection prior to issuing Health Certificate for export to Ireland. All bags inspected. No other molluscs observed.

Certificate Ref No: INTRA.GB.2019.0029407; Local Ref No: MD19/128

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

- 1. Business/site details summary checked by site representative?
- 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="30"/>	Facilities stocked	<input type="text" value="10"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="Mussels"/>				
Age group	<input type="text" value="2018 -14"/>				
No Fish	<input type="text" value="200 Tonnes"/>				
Mean Fish Wt	<input type="text" value="35-40 mm"/>				
Next Fallow Date (Site)	<input type="text" value="N/A"/>	Next Input Date (Site)	<input type="text" value="Natural settlement of stock"/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

- 1. Movement records available for inspection?
- 2. Date of last inspection:
- 3. Are records complete and correctly entered?
- 4. Are movement records available for dead fish and waste?
- 5. Are records complete and correctly entered?
- 6. Are health certificates for introductions (outwith GB) available?

Transport Records

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

- 1. Mortality records available for inspection?
- 2. How are mortalities disposed of?
 If other detail:
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks):
- 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
- 6. Any other peaks in mortality during period checked?
 If yes, detail:
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	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: 16/10/19/ - 22/10/19

Loch Striven Mussel Farms Ltd
The Point Ardtaraig Estate
Loch Striven
Argyll
PA23 8RG

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

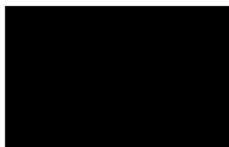
BUSINESS No	SB0530	DATE OF VISIT	22/10/2019
SITE No	SS0759	SITE NAME	Fearna
INSPECTOR		CASE No	20190621

Inspection for placing on the market in the EU

In accordance with the Trade in Animals and Related Products (Scotland) Regulations 2012 and European Community Council Directive 2006/88/EC, the above site was visited and a consignment of juvenile common mussels (*Mytilus edulis*) for placing on the market in the Republic of Ireland was inspected. A health certificate was issued which must travel with the consignment to the destination. The official authority in the importing country has been notified.

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: 6 November 2019

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
Business No: Business Name:

Case Types: 1 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 fish present? If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
Gross pathology observed? If yes, see additional information/clinical score sheet.
Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No observed mortality on site.

16 bags (19.2 Tonnes) of mussels brought ashore for inspection prior to issuing Health Certificate for export to Ireland. All bags inspected. No other molluscs observed

Certificate Ref No: INTRA.GB.2019.0029408; Local Ref No: MD19/129

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="30"/>	Facilities stocked	<input type="text" value="10"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="Mussels"/>				
Age group	<input type="text" value="2018 - 14"/>				
No Fish	<input type="text" value="181 Tonnes"/>				
Mean Fish Wt	<input type="text" value="35-40 mm"/>				
Next Fallow Date (Site)	<input type="text" value="N/A"/>	Next Input Date (Site)	<input type="text" value="Natural settlement of stock"/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	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:	16/10/19 - 23/10/19
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Loch Striven Mussel Farms Ltd
The Point Ardtaraig Estate
Loch Striven
Argyll
PA23 8RG

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

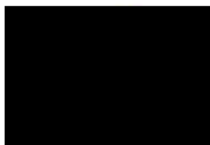
BUSINESS No	SB0530	DATE OF VISIT	23/10/2019
SITE No	SS0759	SITE NAME	Fearna
INSPECTOR		CASE No	20190622

Inspection for placing on the market in the EU

In accordance with the Trade in Animals and Related Products (Scotland) Regulations 2012 and European Community Council Directive 2006/88/EC, the above site was visited and a consignment of juvenile common mussels (*Mytilus edulis*) for placing on the market in the Republic of Ireland was inspected. A health certificate was issued which must travel with the consignment to the destination. The official authority in the importing country has been notified.

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: 6 November 2019

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
Business No: Business Name:

Case Types: 1 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 fish present? If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
Gross pathology observed? If yes, see additional information/clinical score sheet.
Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

No observed mortality on site.

16 bags (19.2 Tonnes) of mussels brought ashore for inspection prior to issuing Health Certificate for export to Ireland. All bags inspected. No other molluscs observed

Certificate Ref No: INTRA.GB.2019.0029409; Local Ref No: MD19/130

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="30"/>	Facilities stocked	<input type="text" value="10"/>	No facilities inspected	<input type="text" value="0"/>
Species	<input type="text" value="Mussels"/>				
Age group	<input type="text" value="2018 - 14"/>				
No Fish	<input type="text" value="162 Tonnes"/>				
Mean Fish Wt	<input type="text" value="35-40 mm"/>				
Next Fallow Date (Site)	<input type="text" value="N/A"/>		Next Input Date (Site)	<input type="text" value="Natural settlement"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

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)?	
If other, detail:	
6. Are medicines stored appropriately?	

Biosecurity Records

1. Biosecurity records available for inspection?	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	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: 16/10/2019 - 24/10/19

Case No: 2019-0623 Date of visit: 24/10/2019
 Site No: SS0759 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
Mov	06/11/2019		

Loch Striven Mussel Farms Ltd
The Point Ardtaraig Estate
Loch Striven
Argyll
PA23 8RG

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

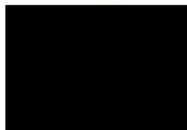
BUSINESS No	SB0530	DATE OF VISIT	24/10/2019
SITE No	SS0759	SITE NAME	Fearna
INSPECTOR		CASE No	20190623

Inspection for placing on the market in the EU

In accordance with the Trade in Animals and Related Products (Scotland) Regulations 2012 and European Community Council Directive 2006/88/EC, the above site was visited and a consignment of juvenile mussels (*Mytilus edulis*) for placing on the market in the Republic of Ireland was inspected. A health certificate was issued which must travel with the consignment to the destination. The official authority in the importing country has been notified.

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: 6 November 2019

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

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
Business No: Business Name:

Case Types: 1 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: ST Water type: S CoGP MA M-40

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
Gross pathology observed? If yes, see additional information/clinical score sheet.
Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Site inspected following report of increased mortality by business

Hydrolicer treatment 03 - 07 October, Salmosan treatment carried out 15-20 October

Site is being harvested out and is due to be fallow by the end of October

Several lethargic fish observed in all stocked cages on site, some with visible sea lice damage. 5 fish removed for diagnostic sampling.

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="12"/>	Facilities stocked	<input type="text" value="9"/>	No facilities inspected	<input type="text" value="12"/>
Species	<input type="text" value="SAL LUM"/>				
Age group	<input type="text" value="2018 Q3"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="284,000"/>	<input type="text" value="~3000"/>			
Mean Fish Wt	<input type="text" value="3.6 kg"/>	<input type="text" value="Mixed"/>			
Next Fallow Date (Site)	<input type="text" value="November 2019"/>	Next Input Date (Site)	<input type="text" value="2020 Q2"/>		

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

1. Movement records available for inspection?
 2. Date of last inspection:
 3. Are records complete and correctly entered?
 4. Are movement records available for dead fish and waste?
 5. Are records complete and correctly entered?
 6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
 If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
 If other detail:
 3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked?
 If yes, detail:
 7. Have increased (unexplained) mortalities been reported to vet or FHI?
 If yes, detail action:
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	T.M.S., Salmosan	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	T.M.S., Salmosan	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).	suspected bacterial infection, likely pasteurella skyensis. Anaemia the most likely cause of increased mortality.	

Records checked between: 19/09/2019 - 23/10/2019

Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1							
Fish nos	1	2	3	4	5	1-5							
Pool Group	P1	P1	P1	P1	P1								
Species	SAL	SAL	SAL	SAL	SAL	SAL							
Average weight	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000							
Sex	N/A	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW	SW							
Stock Details		Loch Arkaig	Loch Arkaig	Loch Arkaig	Loch Arkaig	Loch Arkaig	Loch Arkaig						
	Stock Origin												
Facility No	14	14	14	14	15								

10/2019 Additional Sample Information:
BA-STORAGE - Kidney tissue stored in universals for pasteurella skyensis testing

6 Total Tests assigned 4

Case no: 2019-0624

Site No: FS0629

Method of killing:

Date of visit: 23/10/2019

Inspector(s):

Sheet Relevant: Y

S for strong presence: M for medium presence: W for weak presence

Fish Number		F1	F2	F3	F4	F5						
Time sampled after death (if > 45 minutes)		90 min	90 mins	90 mins	90 mins	90 mins						
External Signs												
Behaviour	Moribund											
	Lethargic	S	S	S	S	S						
	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											
	Haemorrhagic											
Gills	Pale	M	M	M	M	M						
	Zoned											
	Necrotic											
Lesions	Flank											
	Elsewhere											
Vent	Inflamed											
	Trailing faeces											
Lice Load	Estimate numbers	~15	~15	~15	~15	~15						
Internal Signs												
Ascites	Clear	M	M	M	M	S						
	Bloody											
Oedema	In tissues											
Heart	Pale/anaemic	M	M	M	M	M						
	Granulomas											
	Deformed											
Liver	Petechial haem					W						
	Gross haem											
	Tissue breakdown											
	Enlarged											
	Colour number(s)	2	3	1	2	3						
	Granulomas											
	Lesions											
Pyloric caeca	Petechial haem					W						
	Tubules mauve											
	Lack of fat											
Spleen	Enlarged											
	Granulomas		W	M	M	W						
Gut	No food present											
	Yellow pseudo-faeces					S						
	External haem											
	Internal haem											
Body wall	Haemorrhaging											
Swim bladder	Haemorrhaging											
	Fluid filled				M	S						
Kidney	Swollen											
	Grey											
	Granular			W		W						
	Liquefied											
General	Parasites present											
	Anaemia											

Case no: 2019-0624

Date of visit: 23/10/2019

S for strong presence: M for medium presence: W for w

Fish Number													
Time sampled after death (if > 45 minutes)													
External Signs													
Behaviour	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												
	Haemorrhagic												
Gills	Pale												
	Zoned												
	Necrotic												
Lesions	Flank												
	Elsewhere												
Vent	Inflamed												
	Trailing faeces												
Lice Load	Estimate numbers												
Internal Signs													
Ascites	Clear												
	Bloody												
Oedema	In tissues												
Heart	Pale/anaemic												
	Granulomas												
	Deformed												
Liver	Petechial haem												
	Gross haem												
	Tissue breakdown												
	Enlarged												
	Colour number(s)												
	Granulomas												
	Lesions												
Pyloric caeca	Petechial haem												
	Tubules mauve												
	Lack of fat												
Spleen	Enlarged												
	Granulomas												
Gut	No food present												
	Yellow pseudo-faeces												
	External haem												
	Internal haem												
Body wall	Haemorrhaging												
Swim bladder	Haemorrhaging												
	Fluid filled												
Kidney	Swollen												
	Grey												
	Granular												
	Liquefied												
General	Parasites present												
	Anaemia												

Additional comments:

Site No: FS0629
Case No: 2019-0624
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



Case No: 2019-0624 Date of visit: 23/10/2019

Site No: FS0629 Inspector: [Redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
MG_IHN	0/1	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_IPN	0/1	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_ISA	0/1	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_SAV	0/1	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_VHS	0/1	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_AGD	5/5	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_PARA_THER	5/5	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MGSAL_POX	3/5	01/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
BACT_VSPE	5/5	08/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
BACT_PASS	2/5	08/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_CGDH	5/5	25/11/2019	[Redacted]	25/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_GPAT	5/5	25/11/2019	[Redacted]	25/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_PMCH	5/5	25/11/2019	[Redacted]	25/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_PASS	1/5	25/11/2019	[Redacted]	25/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]

Report Summary			
Case Type	Date	Insp	2 nd Insp
REP	01/11/2019	[Redacted]	[Redacted]
DIA	05/12/2019	[Redacted]	[Redacted]

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0119	DATE OF VISIT	23/10/2019
SITE No	FS0629	SITE NAME	Poll Na Gille
INSPECTOR	[REDACTED]	CASE No	20190624

Section 1: Summary

The above site was inspected following a report of increased mortality by the business. During the inspection a number of lethargic fish were observed in all cages on site. Five fish were removed for further examination and subsequent sampling.

Histopathology examination revealed mild multifactorial gill pathology. Multifocal hepatic necrosis was also noted. Mild nephritis likely associated with *Pasteurella skyensis*. The presence of *Pasteurella skyensis* was confirmed by bacterial isolation and molecular genetic speciation, the level and purity suggest this bacterium would be implicated in fish morbidity. *Vibrio* sp. was also identified from bacterial analysis.

Due to gill health issues observed on site, samples were screened for amoebic gill disease, salmon gill poxvirus and *Paranucleospora theridion* (syn, *Desmozoon lepeophtherii*). Samples tested positive for all three pathogens.

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

Section 2: Case Detail

Observations

The above site was inspected following a report of increased mortality by the business. Inspection of records on site showed mortality levels of 1.1%, 4.08% and 10.11% for the previous three weeks respectively. Increased mortality was attributed to *Pasteurella skyensis*, complex gill disease and anaemia. During inspection of the site lethargic fish were observed in all cages. Five fish were removed for further examination and subsequent sampling.

R09

External examination showed pale gills in all five fish, there was an estimated lice load of 15 (all stages) on all five fish.

Internal examination showed pale hearts, pale livers and the presence of clear ascites in all five fish. Granulomas were observed in the spleen of fish 2-5, and in the kidney of fish 3 and 5. Fluid was observed in the swim bladder of fish 4-5. Petechial haemorrhaging of the liver and pyloric caeca as well as presence of yellow pseudo-faeces in the gut, was noted in fish 5.

Samples

Samples were collected from fish 1-5 according to the table below:

Fish number	Pool number	Facility number	Species	Stage	Origin
1-4	1	14	Atlantic salmon	3.8 kg 2018 Q3	Loch Arkaig
5	1	15	Atlantic salmon	3.8 kg 2018 Q3	Loch Arkaig

Results

Bacteriology: Kidney and gill material from fish 1-5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- *Pasteurella skyensis* (F2 and F4, kidney)
- *Vibrio* sp. (F1, 2, 3 and 5, gill. F3-5, kidney)

DNA sequence analysis was performed on a suspected *Pasteurella skyensis* colony. Results showed the isolate to be *Pasteurella skyensis*.

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

Salmon gillpox virus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F2	21.39	32.81	32.81	32.79	POSITIVE
F3	21.28	>40	38.29	>40	POSITIVE
F4	21.02	>40	38.55	>40	POSITIVE

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

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.24	33.78	34.49	34.00	POSITIVE
F2	21.39	31.96	31.94	31.91	POSITIVE
F3	21.28	33.94	34.20	34.52	POSITIVE
F4	21.02	33.12	33.10	33.09	POSITIVE
F5	20.76	32.45	32.43	32.09	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.24	36.17	35.80	35.93	POSITIVE
F2	21.39	32.47	32.21	31.99	POSITIVE
F3	21.28	33.18	32.85	33.34	POSITIVE
F4	21.02	30.16	30.42	30.06	POSITIVE
F5	20.76	30.91	30.55	30.83	POSITIVE

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from fish 1-5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild multifocal interlamellar hyperplasia and lamellar fusion (F2 & F4). F4 also displayed some tip bluntness. Scattered aneurysmal dilation/telangiectasia and lamellar thrombosis noted in all fish. Generalized epithelial lifting likely associated with post mortem artefact.

Skin & Muscle: Within normal range.

Heart: Small foci of infiltration of inflammatory cells (F1). Mild pericarditis (F4)

Gut and pyloric caeca: Some fibrous adhesions (likely associated with vaccine administration). Marked cell sloughing (likely associated with post mortem artefact).

Pancreas: Within normal range.

Liver: Mild to moderate coalesce multifocal hepatic necrosis (all fish). Mild diffuse hepatocyte vacuolation (F1).

Kidney: Some mild thickening of the glomerular basement membranes (F2, F4), some glomeruli with evidences of necrosis and presence of rod shape Gram negative bacteria (F2).

Spleen: Small foci necrosis of (white pulp) .

Signed:



Fish Health Inspector

Date: 05/12/2019

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

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

██████████
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 VISIT	23/10/2019
SITE No	FS0629	SITE NAME	Poll Na Gille
INSPECTOR	██████████	CASE No	20190624

The above site was inspected, following a report of increased mortality by the business.

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

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

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

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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: 01/11/2019

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

R10

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Tel - 0131 244 3498 Fax - 01224 295620 Email - ms.fishhealth@gov.scot
Website - www.gov.scot/Topics/marine/science



F1-3



F4-5



F1



F2



F3



F4



F5

Case No: Date of visit:

Time spent on site: Main Inspector:

Site No: Site Name:
 Business No: Business Name:

Case Types: 1 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: ST Water type: S CoGP MA M-40

Dead/weak/abnormally behaving fish present? If yes, see additional information/clinical score sheet.
 Clinical signs of disease observed? If yes, see additional information/clinical score sheet.
 Gross pathology observed? If yes, see additional information/clinical score sheet.
 Diagnostic samples taken?

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Site inspected following report of increased mortality from business

Hydrolicer treatments carried out 16-18 and 28-29 September

Site currently harvesting out, due to be fallow by end of October

Several lethargic fish observed in both cages, 5 fish removed for diagnostic sampling.

Case No: **2019-0625** Site No: **FS0859**
 Date of Visit: **23/10/2019** Inspector(s): **[Redacted]**

Registration/Authorisation Details

1. Business/site details summary checked by site representative? **Y**
 2. Changes made to details? **Y**

Site Details

Total No facilities	4	Facilities stocked	2	No facilities inspected	4
Species	SAL LUM				
Age group	2018 Q4	2018			
No Fish	124,078	200			
Mean Fish Wt	3.9 kg	Mixed			
Next Fallow Date (Site)	30/10/2019		Next Input Date (Site)	2020 Q2	

Recent (last 4 wks) disease problems? **Y** Any escapes (since last visit)? **N**
 If yes, detail: **Anaemia, suspected pasteurilla skyensis**

Movement Records

1. Movement records available for inspection? **Y**
 2. Date of last inspection: **26/06/2019**
 3. Are records complete and correctly entered? **Y**
 4. Are movement records available for dead fish and waste? **Y**
 5. Are records complete and correctly entered? **Y**
 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)? **[Redacted]**
 If yes, is there a system in place for maintenance of transportation records? **[Redacted]**

Mortality Records

1. Mortality records available for inspection? **Y**
 2. How are mortalities disposed of? **Whole fish - Dundas Chemicals**
 If other detail: **Also taken to Energen Biogas, Cumbernauld**
 3. Mortality records complete and correctly entered? **Y**
 4. Recent mortality (last 4 wks): **w/b 23/09/19 - 2131 (0.83%), w/b 30/09/19 - 1479 (0.58%), w/b 07/10/19 - 6062 (2.4%), w/b 14/10/19 - 14173 (5.62%). Recent increase in mortality attributed to anaemia and suspected pasteurilla skyensis infection. Both remaining stocked cages affected.**
 5. Evidence of recent increased/atypical mortalities? **Y**
 If yes, facility nos/no mortality per facility/no stock per facility/reason: **See above**

6. Any other peaks in mortality during period checked? **Y**
 If yes, detail: **w/b 22/07 - 7851 (2.28%), 09/09 - 3369 (1.28%), 16/09 - 3184 (1.23%) - attributed to anaemia**
 7. Have increased (unexplained) mortalities been reported to vet or FHI? **Y**
 If yes, detail action: **Vets have attended site, samples taken. Site harvesting, due to fallow by end of October**
 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet. **Y**

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	T.M.S.	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	T.M.S.	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).		

Bacteria present in stock on site, likely *pasteurella skyensis*, however mortality most likely a result of anaemia

Records checked between: 26/06/2019 - 23/10/2019

Case no: Site No: Date of visit/
 Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	F4	F5	P1						
Fish nos	1	2	3	4	5	1-5						
Pool Group	P1	P1	P1	P1	P1							
Species	SAL	SAL	SAL	SAL	SAL	SAL						
Average weight	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000						
Sex	N/A	N/A	N/A	N/A	N/A	N/A						
Water Type	SW	SW	SW	SW	SW	SW						
Stock Details		Glenfinnan	Glenfinnan	Glenfinnan	Glenfinnan	Glenfinnan	Glenfinnan					
	Stock Origin											
Facility No	2	2	2	2	2	2						

10/2019 Additional Sample Information:

BA-STORAGE - Kidney tissue stored in universals for pasteurella skyensis testing

6

Total Tests assigned

4

Case no: 2019-0625

Site No: FS0859

Method of killing: Percussive

Date of visit: 23/10/2019

Inspector(s):

Sheet Relevant: Y

S for strong presence: M for medium presence: W for weak presence

Fish Number		F1	F2	F3	F4	F5					
Time sampled after death (if > 45 minutes)		90 min	90 mins	90 mins	90 mins	90 mins					
External Signs											
Behaviour	Moribund										
	Lethargic	S	S	S	S	S					
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen		M								
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
	Flared										
Haemorrhaging	Throat										
	Ventrum			M		W					
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale	M	M	M	M	M					
	Zoned										
	Necrotic										
Lesions	Flank										
	Elsewhere										
Vent	Inflamed										
	Trailing faeces										
Lice Load	Estimate numbers	~20	~20	~20	~20	~20					
Internal Signs											
Ascites	Clear		M		M						
	Bloody										
Oedema	In tissues										
Heart	Pale/anaemic	M	M	M	M	M					
	Granulomas										
	Deformed	W									
Liver	Petechial haem			W		W					
	Gross haem										
	Tissue breakdown										
	Enlarged										
	Colour number(s)	4	3	3	3	4					
	Granulomas										
	Lesions										
Pyloric caeca	Petechial haem			M		W					
	Tubules mauve										
	Lack of fat										
Spleen	Enlarged	M				M					
	Granulomas			W							
Gut	No food present										
	Yellow pseudo-faeces										
	External haem										
	Internal haem										
Body wall	Haemorrhaging			W		W					
Swim bladder	Haemorrhaging										
	Fluid filled					M					
Kidney	Swollen										
	Grey										
	Granular		W		W						
	Liquefied										
General	Parasites present										
	Anaemia										

Case no: Date of visit:

S for strong presence: M for medium presence: W for w

Fish Number														
Time sampled after death (if > 45 minutes)														
External Signs														
Behaviour	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													
	Haemorrhagic													
Gills	Pale													
	Zoned													
	Necrotic													
Lesions	Flank													
	Elsewhere													
Vent	Inflamed													
	Trailing faeces													
Lice Load	Estimate numbers													
Internal Signs														
Ascites	Clear													
	Bloody													
Oedema	In tissues													
Heart	Pale/anaemic													
	Granulomas													
	Deformed													
Liver	Petechial haem													
	Gross haem													
	Tissue breakdown													
	Enlarged													
	Colour number(s)													
	Granulomas													
	Lesions													
Pyloric caeca	Petechial haem													
	Tubules mauve													
	Lack of fat													
Spleen	Enlarged													
	Granulomas													
Gut	No food present													
	Yellow pseudo-faeces													
	External haem													
	Internal haem													
Body wall	Haemorrhaging													
Swim bladder	Haemorrhaging													
	Fluid filled													
Kidney	Swollen													
	Grey													
	Granular													
	Liquefied													
General	Parasites present													
	Anaemia													

Additional comments:

F1 and F3 - sea lice damage on head. F1 - heart had fluid filled sac attached. F4 - melanisation of swim bladder and gut.

Case No: 2019-0625

Date of visit: 23/10/2019

Site No: FS0859

Inspector: [Redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
MG_AGD	5/5	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_IHN	0/1	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_IPN	0/1	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_ISA	0/1	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_PNST	5/5	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_SPVP	5/5	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_SAV	0/1	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
MG_VHS	0/1	28/10/2019	[Redacted]	31/10/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
BACT_VVIS	4/5	08/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
BACT_VSPE	4/5	08/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
BACT_PASS	4/5	08/11/2019	[Redacted]	08/11/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_AMGD	3/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_GPAT	5/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_CGDH	5/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_EPIT	1/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_KPAT	4/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]
HIST_SPAT	3/5	02/12/2019	[Redacted]	02/12/2019	[Redacted]	05/12/2019	[Redacted]	[Redacted]

Report Summary			
Case Type	Date	Insp	2 nd Insp
REP	01/11/2019	[Redacted]	[Redacted]
DIA	05/12/2019	[Redacted]	[Redacted]

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

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0119	DATE OF VISIT	23/10/2019
SITE No	FS0859	SITE NAME	Port Na Cro
INSPECTOR	[REDACTED]	CASE No	20190625

Section 1: Summary Section 1: Summary

The above site was inspected following a report of increased mortality by the business. During the inspection a number of lethargic fish were observed in all cages on site. Five fish were removed for further examination and subsequent sampling.

Histopathology examination revealed mild multifactorial gill pathology and multifocal hepatic necrosis. Nephrosis and splenitis were also noted. These lesions are likely associated with the isolation of *Pasteurella skyensis*. The presence of *Pasteurella skyensis* was confirmed by bacterial isolation and molecular genetic speciation, the level and purity suggest this bacterium would be implicated in fish morbidity. *Moritella viscosa* and *Vibrio* sp. were also identified.

Due to gill health issues observed on site, samples were screened for amoebic gill disease, salmon gill poxvirus and *Paranucleospora theridion* (syn, *Desmozoon lepeophtherii*). Samples tested positive for all three pathogens.

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

Section 2: Case Detail

Observations

The above site was inspected following a report of increased mortality by the business. Inspection of records on site showed mortality levels of 2.4% and 5.62% for the previous two weeks respectively. Increased mortality was attributed to *Pasteurella skyensis*, complex gill disease and anaemia. During inspection of the site lethargic fish were observed in all cages. Five fish were removed for further examination and subsequent sampling.

R09

External examination showed pale gills in all five fish. Haemorrhaging of the ventrum was observed on fish 3 and 5, and fish 2 had a distended abdomen. All five fish had an approximate sea lice load of 20 (all stages).

Internal examination showed pale hearts in all five fish, the heart of fish 1 also appeared deformed with fluid present in the sinus venosus. Clear ascites was present in the body cavity of fish 2 and 4, the kidney of both fish also appeared granular. Petechial haemorrhaging of the liver, pyloric caeca and body wall was observed in fish 3 and 5, fish 5 also displayed petechial haemorrhaging of the swim bladder, in which fluid was also present. Fish 1 and 5 had enlarged spleens and granulomas were present in the spleen of fish 3.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1-5	1	2	Atlantic salmon	3.8 kg 2018 Q4	Glenfinnan

Results

Bacteriology: Kidney and gill material from fish 1-5 was inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- *Pasteurella skyensis* (F1, F3, F4 and F5, kidney)
- *Moritella viscosa* (F1-3, kidney. F1 and F5, gill)
- *Vibrio* sp. (F2-3, kidney. F2, F4 and F5, gill)

DNA sequence analysis was performed on a suspected *Pasteurella skyensis* colony. Results showed the isolate to be *Pasteurella skyensis*.

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

Salmon gillpox virus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	22.66	34.51	34.72	34.55	POSITIVE
F2	22.97	>40	39.52	38.73	POSITIVE
F3	22.23	35.12	35.01	34.90	POSITIVE
F4	22.37	34.23	34.2	34.54	POSITIVE
F5	22.54	37.22	37.12	38.69	POSITIVE

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

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	22.66	29.27	29.25	29.15	POSITIVE
F2	22.97	32.17	32.25	32.18	POSITIVE
F3	22.23	29.99	29.86	29.90	POSITIVE
F4	22.37	28.53	28.55	28.46	POSITIVE
F5	22.54	31.73	31.52	31.54	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	22.66	31.12	31.20	31.11	POSITIVE
F2	22.97	36.62	37.11	36.62	POSITIVE
F3	22.23	27.76	27.79	27.76	POSITIVE
F4	22.37	31.01	30.89	31.01	POSITIVE
F5	22.54	33.02	33.21	33.02	POSITIVE

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from fish 1-5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Mild multifocal interlamellar hyperplasia and lamellar fusion and occasional lacunae (F1, F3 & F4). Occasional basophilic epithelial inclusions (likely epitheliocystis) (F3) and several amoebic cells resembling *Neoparamoeba perurans* (F1, F3, F4). Scattered aneurysmal dilation/telangiectasia and lamellar thrombosis noted in all fish. Generalized epithelial lifting likely associated with post-mortem artefact.

Skin & Muscle: Degeneration of single skeletal white fibres (F1).

Heart: Within normal range

Gut and pyloric caeca: Some fibrous adhesions (likely associated with vaccine administration) (all fish). Marked cell sloughing (likely associated with post-mortem artefact).

Pancreas: Within normal range.

Liver: Mild multifocal hepatic necrosis (F2) and F3 displayed focal thickness of the hepatic capsule.

Kidney: Presence of proteinaceous eosinophilic material filling the Bowman's space of some glomeruli and the same material was also noted within few renal tubules (F1, F3). Some individuals also displayed foci of haematopoietic tissue depletion (F1, F3-F5). Some inflammatory cell infiltration and few glomeruli displayed rod-shaped Gram-negative bacteria also noted in F5.

Spleen: Few foci white pulp depletion (F1, F3). F5 displayed one asteroid body in the parenchyma and minor infiltration of polymorphonuclear cells. The adipose tissue surrounding the spleen had small foci of haemorrhage (F5).

Signed:



Date: 05/12/2019

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

██████████
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 VISIT	23/10/2019
SITE No	FS0859	SITE NAME	Port Na Cro
INSPECTOR	██████████	CASE No	20190625

The above site was inspected, following a report of increased mortality by the business.

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

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

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

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

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: 01/11/2019

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

R10

Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Tel - 0131 244 3498 Fax - 01224 295620 Email - ms.fishhealth@gov.scot
Website - www.gov.scot/Topics/marine/science



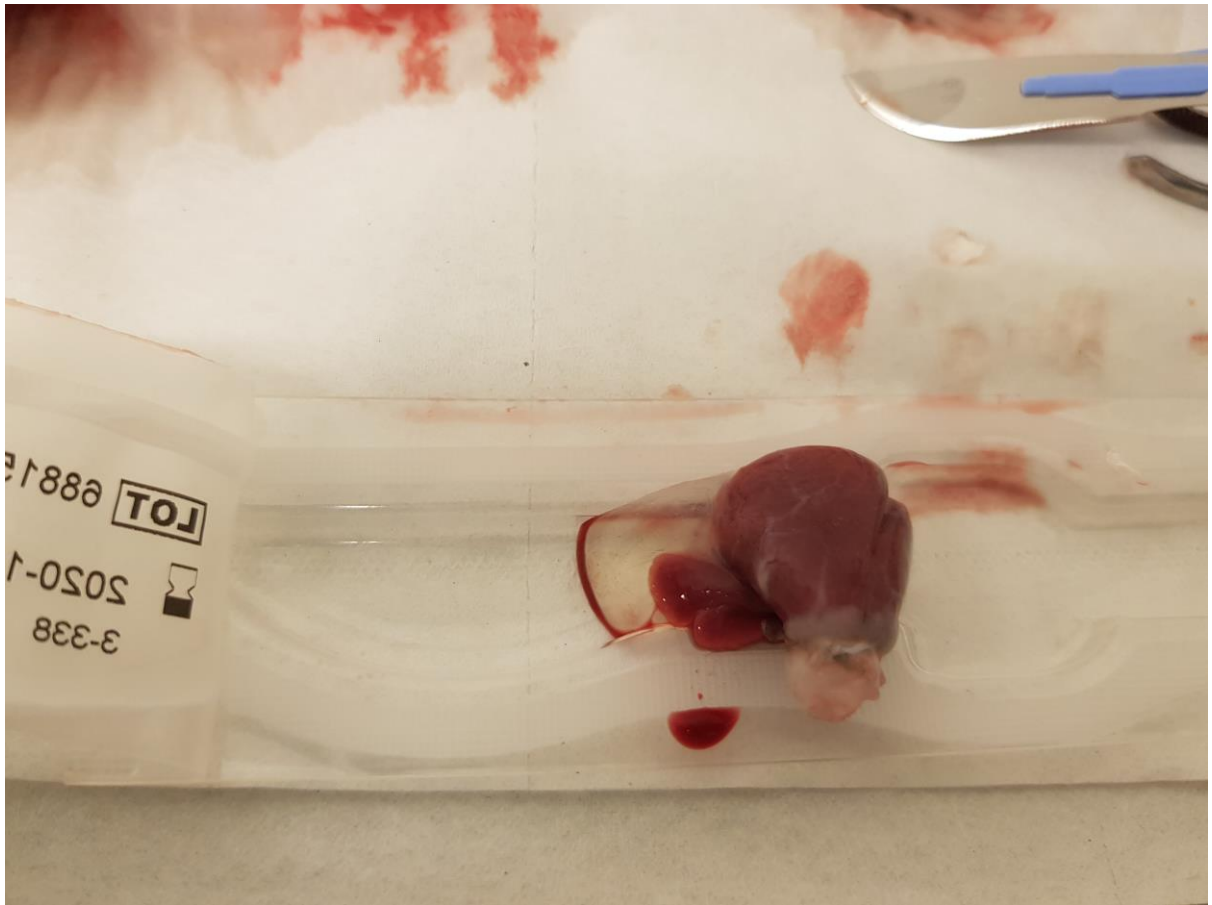
F1-F3



F4-5



F1



F1 Heart



F2



F3



F4



F5

Case No: 2019-0627 Date of visit: 31/10/2019

Time spent on site: 5 hrs Main Inspector:

Site No: FS0605 Site Name: Creag an T'Sagairt (Loch Hourn)

Business No: FB0119 Business Name: Mowi Scotland Ltd

Case Types: 1 ECI 2 CNI 3 SLI 4 VMD 5 6

Water Temp (°C): 12.8 Thermometer No: T148 FHI 045 completed

Observations: Region: HI Water type: S CoGP MA M-22

Dead/weak/abnormally behaving fish present? N If yes, see additional information/clinical score sheet.

Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.

Gross pathology observed? N If yes, see additional information/clinical score sheet.

Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

All pens inspected. Fish all behaving as normal and look to be in good condition. Fish sampled for VMD appeared healthy internally. All pens equipped with lice skirts and no lice noted. Site to begin harvesting week 45, 2019. Lumpsucker cleanerfish on site all from farmed source. No issues raised.

Site inspection and case paperwork carried out by [REDACTED] while being audited by [REDACTED]

Case No: Site No:
 Date of Visit: Inspector(s):

Registration/Authorisation Details

- 1. Business/site details summary checked by site representative?
- 2. Changes made to details?

Site Details

Total No facilities	<input type="text" value="12"/>	Facilities stocked	<input type="text" value="12"/>	No facilities inspected	<input type="text" value="12"/>
Species	<input type="text" value="SAL"/>	<input type="text" value="LUM"/>			
Age group	<input type="text" value="2018 Q2"/>	<input type="text" value="2018"/>			
No Fish	<input type="text" value="298,385"/>	<input type="text" value="5,617"/>			
Mean Fish Wt	<input type="text" value="7.4kg"/>	<input type="text" value="150g"/>			
Next Fallow Date (Site)	<input type="text" value="Jan. 2020"/>		Next Input Date (Site)	<input type="text" value="July 2021"/>	

Recent (last 4 wks) disease problems? Any escapes (since last visit)?
 If yes, detail:

Movement Records

- 1. Movement records available for inspection?
- 2. Date of last inspection:
- 3. Are records complete and correctly entered?
- 4. Are movement records available for dead fish and waste?
- 5. Are records complete and correctly entered?
- 6. Are health certificates for introductions (outwith GB) available?

Transport Records

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

- 1. Mortality records available for inspection?
- 2. How are mortalities disposed of?
- If other detail:
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks):
- 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
- 6. Any other peaks in mortality during period checked?
- If yes, detail:
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action:
- 8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	T.M.S., Salmosan	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	T.M.S., Salmosan	
If other, detail:		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any increased (unexplained) mortality at the site been included?	<input type="checkbox"/>	Y
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>	Y
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
If no, detail:		

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	N
If yes, detail (if not detailed under recent disease problems).		

Records checked between: 08/08/2017 - 31/10/2019

Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No												
Fish nos	1	2										
Pool Group												
Species	SAL	SAL										
Average weight	7.4000	7.4000										
Sex	N/A	N/A										
Water Type	SW	SW										
Stock Details		Loch Lochy	Loch Lochy									
	Stock Origin											
Facility No	10	3										

Additional Sample Information:

--

0

Total Tests assigned

0

Case Number:	2019-0627	Site No:	FS0605	Insp:		
Date of Visit	31/10/2019	No of movements/supp./dest.			Score	
Live fish movements		0	1-5	6-10	>10	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	0
	Number of suppliers	0	5	10	14	0
Movements off	Frequency of movements off	0	3	6	10	10
	Number of destinations	0	3	6	10	3
Exposure via water	Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		1
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
Management practices		None	Secure	Unsecure		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				
	Processing own fish (re-cycling risk)	1				1
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				0
	Common processes with other farms	3				
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
Biosecurity	Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating from single shorebase	0	1	2		0
	Sites sharing staff and equipment	0	1	2		0
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
Total Rank					15	LOW

Case No: **2019-0627**

Site No: **FS0605**

Sea Lice Inspection (Seawater Sites Only)

1. Has the site experienced sea lice problems in the previous 4 years?
2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?
If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
11. Has any other action been taken (where applicable)?
12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
13. Are treatments, where conducted, carried out in cooperation between participating farms?
14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

Containment Inspection

1. Has the site experienced equipment damage due to predators in the current or previous production cycles?
2. Are measures in place to mitigate against the predation experienced on site? (Detail below)

Tensioned Nets, Top Nets, A.D.D, MML

If other, detail below:

3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?
If Yes proceed with questions 4 – 9. If No skip to question 10
4. Have these been reported to Scottish Ministers?
5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover escapees? If yes give detail
8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)

Case No: 2019-0627

Site No: FS0605

Date of Visit: 31/10/2019

Inspector: [REDACTED]

Point of Compliance

1. Is the farm under inspection located within a farm management area?

If N, no further questions require completion.

Points of Compliance for Both Farm Management Agreements and Statements

2. Has a current farm management agreement or statement (FMAg/S) been prepared?

3. Is the current FMAg/S available for inspection?

4. Does the FMAg/S identify the relevant farm management area?

5. Does the FMAg/S identify the fish farm site(s) to which it applies?

6. Does the FMAg/S identify the date of commencement of the agreement or statement?

7. Does the FMAg/S identify the date of review?

Arrangements for Fish Health Management

8. Does the FMAg/S identify the minimum health standards for the stocks to be introduced to the area or farm?

9. Does the FMAg/S identify the vaccination requirements for stocks held in the area or farm?

10. Does the FMAg/S identify the species of fish which may be stocked into the area or farm?

11. Does the FMAg/S identify the maximum stocking density of any pen on any farm in the area or the individual farm?

12. Does the FMAg/S identify the arrangements for the storage and disposal of any dead fish from any fish farm in the area or the individual farm?

Arrangements for The Management of Sea Lice

13. Does the FMAg/S identify arrangements for the sharing of data on sea lice numbers and treatments?

14. Does the FMAg/S identify the availability and the use of medicines on farms covered by the agreement of statement?

15. Does the FMAg/S identify any requirements for the sensitivity testing of available treatments for sea lice on farms in the area or individual farms?

16. Does the FMAg/S identify the circumstances under which biological controls and cleaner fish are to be used on farms in the area or individual farms?

17. Does the FMAg/S identify the arrangements for synchronous treatments on farms within the area?

Live Fish Movements

18. Does the FMAg/S identify the circumstances when live fish may be introduced or removed from the area or farm?

19. Does the FMAg/S identify the arrangements for the movement of live fish on and off sites in the area or individual farms?

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?

Fallowing

21. Does the FMAg/S identify the dates by which the area or individual farm will be fallow and the earliest date when a farm or area may be restocked?

22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?

23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?

Point of Compliance for Farm Management Agreements Only

24. Does the farm management agreement include arrangements for persons to become, or cease to be, parties to the agreement?

Management and operation

25. Is the fish farm being managed and operated in accordance with the agreement or statement?

26. What is the version no/date of issue of the FMAg/S?

Case No: **2019-0627**

Date of visit: **31/10/2019**

Site No: **FS0605**

Inspector: **[REDACTED]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECI, CNI, SLI, VMD	04/11/2019	[REDACTED]	[REDACTED]

██████████
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 VISIT	31/10/2019
SITE No	FS0605	SITE NAME	Creag an T'Sagairt (Loch Hourn)
INSPECTOR	██████████	CASE No	20190627

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

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

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

Records

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

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

R25

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

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

Medicine records were inspected and found to be adequately maintained.

Samples were taken to be analysed for veterinary residues.

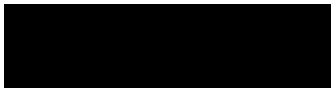
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

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

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

Signed:



Date: 04/11/2019

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

Case No: 2019-0632 Date of visit: 22/10/2019

Time spent on site: 0min Main Inspector:

Site No: SS0917 Site Name: John Muir Building
Business No: SB0544 Business Name: Heriot Watt University

Case Types: 1 INF 2 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: LO Water type: S CoGP MA

Dead/weak/abnormally behaving fish present?
Clinical signs of disease observed?
Gross pathology observed?
Diagnostic samples taken?
If yes, see additional information/clinical score sheet.

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

Information received from commercial samples of 7/30 positive results for *Bonamia ostreae* by PCR. Inspector on route to collect further samples. IDN placed 22/10/19.

Case No: 2019-0632

Date of visit: 22/10/2019

Site No: SS0917

Inspector: [REDACTED]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
INF - no report	30/10/2019	[REDACTED]	[REDACTED]