

Case No: Date of visit:

Additional inspector(s): 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: HI Water type: S CoGP MA: M-22

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.
 Post mortem signs 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:

Fish were transferred from Kingairloch (FS0241) to site between the 27th and 30th November 2025. The fish in the first three movements were transferred in seawater on 27th and 28th November and these fish were put into pen 4. Kingairloch then had a positive result for complex gill disease (CGD) and therefore the next 3 movements on the 29th and 30th November, the fish were transferred in freshwater and put into pen 2.

Kingairloch had reported mortality events for 7 consecutive weeks beginning 13th October 2025 due to "AGD / treatment losses / gill infections and complex gill disease". Mortalities have remained above threshold in the weeks since input to Loch Hour. Week 49 (1st-7th December) = 4.91% (17, 967 fish) and Week 50 = 3.19% (11,114 fish). However, site have reported percentage mortality as 2.68% for week 50 due to an input of fish onto site from Gorsten on Sunday 14th December.

Fish while at Kingairloch had confirmed AGD, *Piscirickettsia salmonis* (SRS), HSMI and CGD. A risk assessment dated 26/11/2025 for the transfer of fish from Kingairloch to Loch Hour was seen.

Treatments: Fish transferred in seawater (pen 4) were treated with freshwater on 7th December. Since treatment mortalities in that pen have dropped from around 1000 fish a day to around an average of 147 per day after two days of treatment losses. However the daily mortality figure is slowly increasing (104 fish on 11th December compared to 216 fish on 15th December). There are no current plans to carry out any more treatments on site.

The company regional health manager has been to site twice since first input. Last site visit report on 12/12/2025 (visit date 11/12/2025) stated that the 2 fish caught for sampling had gills in good condition with mild levels of PGD. Fish behaviour in pen 2 was poor compared to fish behaviour in pen 4. They are seeing a decrease in mortality as well as a decrease in the number of fish with gill damage. They are seeing an increase in physical damage and secondary moritella.

The site have also just received inputs of fish from Gorsten (FS0237) on 14th and 15th December which were all transported in freshwater. These fish are in pens 1 and 3 at Loch Hour. These fish arrived with wrasse. During the physical inspection of the site, pen 1 which arrived the day before had approximately 100 dead and moribund wrasse by the side of the net. The manager was unaware that wrasse were being transported with the salmon. Movement records on site did not include wrasse. During physical inspection of the site, approximately 10 moribund salmon were observed in each pen. In the Kingairloch population of fish in pens 2 and 4, many (50+) were observed with lesions on their bodies with approximately 5-10 fish per pen appearing lethargic, hanging beside the side of the pen net. There was an increase of fish in pen 2 with physical damage compared to pen 4. In the Gorsten fish population, fish in pens 1 and 3 both also had a number of fish (30+) with lesions on their bodies but only 2-5 lethargic fish per pen. Two fish from pen 2, 2 fish from pen 3 and one fish from pen 4 was taken for diagnostic sampling.

Update 06/05/2026 - The company have investigated the movement of wrasse onto site and have provided movement and mortality records for the wrasse.

Case No: **2025-0501** Site No: **FS0605**

Date of Visit: **16/12/2025** Main Insp: **[REDACTED]**

Registration/Authorisation Details

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

Site Details (include cleaner fish for all sections)

Total No facilities	8	Facilities stocked	4	No facilities inspected	8
Species	Atlantic salmon	Wrasse			
Age group	Q1/Q2 2025	Mixed			
No Fish	637,138	1,842			
Mean Fish Wt	1.72kg	120g			
Next Fallow Date (Site)	October 2026		Next Input Date (Site)	Currently unknown	
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?	N
If yes, detail:	AGD, CGD, secondary moritella, PGD				

Movement Records

- 1. Movement records for **all species** held available for inspection?
- 2. Date of last inspection: **30/04/2025**
- 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. Have all introductions and imports (since last inspection) from outwith the GB health zone been recorded in the movement records?

Transport Records

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

Mortality Records

- 1. Mortality records for **all species** held available for inspection?
- 2. How are mortalities disposed of? **Ensiled - on site**
- If other detail: **[REDACTED]**
- 3. Mortality records complete and correctly entered?
- 4. Recent mortality (last 4 wks): **Salmon - Wk 48: 2.02% (7560 fish), Wk 49: 4.91% (17,967 fish), Wk 50: 2.68% (11,114 fish)**
- 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **Pen 2 has the highest mortality which has not reduced significantly since input onto site. After input pen 2 averaged 522 between 3rd-7th December, 263 between 8th-10th December and then 593 between 11th-15th December.**
- 6. Any other peaks in mortality during period checked?
- If yes, detail: **[REDACTED]**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action: **[REDACTED]**
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

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

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Main Insp: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click button

Pool/Fish No	F1	F2	F3	F4	F5							
Fish nos	1	2	3	4	5							
Pool Group												
Species	SAL	SAL	SAL	SAL	SAL							
Average weight	1.8kg	1.8kg	1.8kg	1.8kg	1.8kg							
Sex	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW							
Stock Details		Kingairloch (FS0241)	Kingairloch (FS0241)	Gorsten (FS0237)	Gorsten (FS0237)	Kingairloch (FS0241)						
	Stock Origin											
Facility No	2	2	3	3	4							

Case no: **2025-0501** Site No: **FS0605** Method of killing: **Percussive**
 Date of visit: **16/12/2025** Main Insp: **[REDACTED]** Sheet Relevant: **Y**

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

Fish Number		1	2	3	4	5														
Time sampled after death (if > 45 minutes)			55 mins	1h 10m	1h 20m	1h 30m														
External Signs																				
Behaviour	Moribund																			
	Lethargic	M	M	M	S	S														
	Hanging vertical																			
	Spiralling																			
	Flashing																			
	Loss of equilibrium																			
Body	Dark		M																	
	Distended abdomen																			
	Anorexic																			
	Scale Oedema																			
Opercula	Shortened																			
	Flared																			
Haemorrhaging	Throat																			
	Ventrum																			
	Base of fins				W															
	Elsewhere	W																		
Eyes	Exophthalmic																			
	Enophthalmic (sunken)																			
	Cataract																			
	Haemorrhagic																			
Gills	Pale	W				M														
	Zoned																			
	Necrotic																			
Lesions	Flank	S																		
	Elsewhere		M																	
Vent	Inflamed																			
	Trailing faeces																			
Lice Load	Estimate numbers	0	0	0	0	0														
Internal Signs																				
Ascites	Clear		M																	
	Bloody			W																
Oedema	In tissues																			
Heart	Pale/anaemic			W		W														
	Granulomas																			
	Deformed																			
Liver	Petechial haem																			
	Gross haem																			
	Tissue breakdown																			
	Enlarged			M																
	Colour number(s)	6	3	7	4	2														
	Granulomas																			
	Lesions																			
Pyloric caeca	Petechial haem																			
	Tubules mauve																			
	Lack of fat																			
Spleen	Enlarged	M				M														
	Granulomas																			
Gut	No food present																			
	Yellow pseudo-faeces	S	S	S	S	S														
	External haem																			
	Internal haem																			
Body wall	Haemorrhaging																			
Swim bladder	Haemorrhaging																			
	Fluid filled																			
Kidney	Swollen																			
	Grey																			
	Granular																			
	Liquefied																			
General	Parasites present																			
	Anaemia																			

Additional comments:

Fish 2 showed signs of early maturation and was filled with milt.

Site No: FS0605
Case No: 2025-0501
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



Case No:	2025-0501	Date of visit:	16/12/2025
Site No:	FS0605	Main Insp:	

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
AGD (Neoparamoeba perurans) (PCR) - AGDQ	1/5	24/12/2025		24/12/2025		26/03/2026		
Paranucleospora theridion (PCR) - PNST	5/5	24/12/2025		24/12/2025		26/03/2026		
VHS (PCR) - VHSP	0/5	24/12/2025		24/12/2025		26/03/2026		
ISA (PCR - kidney) - ISAP	1/1	24/12/2025		19/12/2025		26/03/2026		
Salmon gill poxvirus (PCR) - SPVP	5/5	24/12/2025		24/12/2025		26/03/2026		
ISA (real time qPCR - kidney) - KPCR	1/5	24/12/2025		17/12/2025		26/03/2026		
IHN (PCR) - IHNP	0/5	24/12/2025		24/12/2025		26/03/2026		
IPN (PCR) - IPNM	1/5	24/12/2025		24/12/2025		26/03/2026		
Piscine myocarditis virus (CMS) (PCR) - PMVP	0/5	24/12/2025		24/12/2025		26/03/2026		
Salmonid alphavirus (SAV) (PCR) - SALP	0/5	24/12/2025		24/12/2025		26/03/2026		
Aeromonas (histology) - AERH	1/5	19/01/2026		19/01/2026		26/03/2026		
Complex gill issues (histology) - CGDH	5/5	19/01/2026		19/01/2026		26/03/2026		
Skin pathology - SKIN	3/5	19/01/2026		19/01/2026		26/03/2026		
Gill pathology - GPAT	5/5	19/01/2026		19/01/2026		26/03/2026		
Heart pathology - HPAT	4/5	19/01/2026		19/01/2026		26/03/2026		
Spleen pathology - SPAT	4/5	19/01/2026		19/01/2026		26/03/2026		
Kidney pathology - KPAT	5/5	19/01/2026		19/01/2026		26/03/2026		
Shewanella spp - SHEW	5/5	20/01/2026		29/01/2026		26/03/2026		
Vibrio species (culture) - VSPE (Isolate C)	4/5	20/01/2026		29/01/2026		26/03/2026		
Vibrio species (culture) - VSPE (Isolate D)	1/5	20/01/2026		29/01/2026		26/03/2026		
Vibrio species (culture) - VSPE (Isolate E)	1/5	20/01/2026		29/01/2026		26/03/2026		
Aeromonas salmonicida (Furunculosis) - ASAL	1/5	20/01/2026		29/01/2026		26/03/2026		
Enterobacteriaceae family - ENTf	3/5	20/01/2026		29/01/2026		26/03/2026		

Report Summary			
Case Type	Date	Insp	2 nd Insp
DIA	25/03/2026		
Case completion	11/05/2026		

Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0119	Date of visit:	16/12/2025
Site no:	FS0605	Site name:	Creag an T'Sagairt (Loch Hourn)
Case no:	20250501	Inspector:	██████████

Section one: summary

An inspection was conducted at the above site after receiving consecutive mortality reports from the business regarding the site and the previous site the fish were located. Mortality reports attributed mortality to amoebic gill disease (AGD), gill health and treatment, and transfer losses.

During the inspection approximately 10 moribund salmon were observed in each pen. In pens 2 and 4, more than 50 fish were observed with lesions on their bodies with approximately 5-10 fish per pen appearing lethargic, hanging beside the side of the pen net. There was an increase of fish in pen 2 with physical damage compared to pen 4. In pens 1 and 3 more than 30 fish had lesions on their bodies but there were only 2-5 lethargic fish observed per pen. Five fish were taken for diagnostic sampling.

Histopathological examination revealed, moderate, complex gill pathology. Fish 3 exhibited evidence of a systemic bacterial infection; however, no overt bacteria were observed on Gram stain. Fish 5 displayed features resembling *Aeromonas* spp. Fish 1 showed a bacterial ulcerative dermatitis, along with signs of cachexia, which were also observed in Fish 4.

Aeromonas salmonicida was identified on plates taken from kidney and gill material of fish 5. The level and purity of growth would suggest it would be present as a primary pathogen in this fish.

All samples tested positive for salmon gill poxvirus and *Paranucleospora theridion*. Fish 2 also tested positive for *Neoparamoeba perurans* (AGD).

Samples were screened for infectious salmon anaemia virus (ISAV) by QPCR as part of the surveillance program for the control of listed diseases. Fish 1 tested positive for infectious salmon anaemia virus (ISAV) by QPCR and the sequence data confirmed the presence of ISAV HPR0, the non-pathogenic form of the virus. In relation to the ISAV HPR0 result obtained, along with the observations made on site, no further statutory

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action is required to be taken in this case, ISAV HPR0 not being a disease listed in The Aquatic Animal Health (Scotland) Regulations 2009.

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 two: case detail

Observations

The company reported mortality levels over threshold for seven consecutive weeks at Kingairloch (FS0241) before fish were moved to the above site. These mortality reports began at 1.55%, increased to 4.56% in the third week, dropped to 1.19% the fourth week before rising again, peaking at 8.33% in the sixth week and falling to 4.18% the last week the site was stocked.

Fish were transferred onto the current site in two batches. The first batch of fish occurred in two transfers in seawater on 27th and 28th November and these fish were placed in pen 4. The second batch of fish was carried out in three transfers in freshwater on 29th and 30th November and these fish were put into pen 2. Fish while at Kingairloch had confirmed AGD, *Piscirickettsia salmonis* (SRS), heart and skeletal muscle inflammation (HSMI) and complex gill disease (CGD). After initial input, mortalities were higher in pen 4 and these fish were treated with freshwater on 7th December. Since treatment, mortalities in pen 4 dropped from around 1000 fish a day to around an average of 147 per day after two days of treatment losses. However, the daily mortality figure is slowly increasing (104 fish on 11th December compared to 216 fish on 15th December). Daily mortalities in pen 2 have remained between 250-680 per day, averaging at 530 per day. At the time of inspection there were no current plans to carry out any more treatments on site.

The above site also received inputs of fish from another site on the 14th and 15th December which were all transferred in freshwater and placed in pens 1 and 3.

During the physical inspection of the site approximately 10 moribund salmon were observed in each pen. In pens 2 and 4, more than 50 fish were observed with lesions on their heads, flanks or tails with approximately 5-10 fish per pen appearing lethargic, hanging beside the side of the pen net. Fish in pen 2 had a higher number of fish with physical damage compared to pen 4. In pens 1 and 3 more than 30 fish had lesions on their heads, flanks or tails and only 2-5 lethargic fish observed per pen.

Two fish from pen 2, two fish from pen 3 and one fish from pen 4 were taken for diagnostic sampling. The fish sampled had no lice load and all were lethargic and

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easily caught. Externally fish 2 (F2) had a dark body and F1 and F4 had haemorrhaging on the body. Gills were pale in F5 and F1. Fish 2 had lesions on the body. Internally, F2 contained clear ascites and F3 contained bloody ascites. Fish 2 showed signs of early maturation and was filled with milt. The hearts of F3 and F5 were slightly pale. Liver colours ranged with F5 having the lightest coloured liver and F3 having the darkest which was also moderately enlarged. The spleen of F1 and F5 were also enlarged and all fish had yellow pseudo-faeces in the gut.

Samples

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

Fish number	Facility number	Species	Stage	Origin
1 and 2	2	Atlantic salmon	1.8kg 2025 Q1/Q2	Kingairloch (FS0241)
3 and 4	3	Atlantic salmon	1.8kg 2025 Q1/Q2	Gorsten (FS0237)
5	4	Atlantic salmon	1.8kg 2025 Q1/Q2	Kingairloch (FS0241)

Results

Bacteriology:

Kidney, gill and lesion material from F1-F5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- *Aeromonas salmonicida* F5 (kidney and gill)
- *Shewanella putrefaciens* F1 (kidney and gill), F2 (gill), F3 (kidney and gill), F4 (kidney and gill), F5 (gill)
- *Vibrio* sp. isolate C F1 (kidney), F2 (kidney and skin lesion), F4 (gill), F5 (kidney)
- *Vibrio* sp. isolate D F2 (skin lesion)
- *Vibrio* sp. isolate E F1 (skin lesion)
- Enterobacteriaceae family F1, F3, F4 (kidney)

Shewanella putrefaciens, three *Vibrio* species and Enterobacteriaceae family did not have matching characteristics of a primary pathogen. The level and purity of growth would suggest these bacteria are present as secondary pathogens and not the primary source of morbidity.

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Virology:

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

Infectious pancreatic necrosis virus (IPNV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	Negative
F2	-	-	-	-	Negative
F3	-	-	-	-	Negative
F4	-	-	-	-	Negative
F5	17.44	37.69	36.43	36.63	Positive

Infectious salmon anaemia virus (ISAV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	17.99	36.84	37.17	37.06	Positive
F2	-	-	-	-	Negative
F3	-	-	-	-	Negative
F4	-	-	-	-	Negative
F5	-	-	-	-	Negative

F1 QPCR positive Cp 37, segment 6 was amplified and sequenced and determined to be the non-pathogenic HPR0.

Salmon gill poxvirus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.7	27.82	27.87	27.83	Positive
F2	22.12	34.13	34.24	34.54	Positive
F3	22.3	33.57	33.63	33.44	Positive
F4	21.66	26.5	26.57	26.48	Positive
F5	21.9	25.65	25.63	25.65	Positive

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

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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	-	-	-	-	Negative
F2	22.12	35.29	35	35.13	Positive
F3	-	-	-	-	Negative
F4	-	-	-	-	Negative
F5	-	-	-	-	Negative

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.7	22.99	23.05	22.98	Positive
F2	22.12	29.71	29.65	29.72	Positive
F3	22.3	29.86	29.92	29.91	Positive
F4	21.66	25.27	25.25	25.25	Positive
F5	21.9	22.91	22.92	22.91	Positive

Histology:

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

Histopathological examination revealed the following:

Gill: Lamellar adhesions, lamellar epithelial necrosis (F1, F5), very mild lamellar hyperplasia (F2). Multiple numbers of basophilic epithelial inclusions (likely epitheliocystis) (F1). Filament branchitis with foci of granulomatous inflammation displaying centrally Splendore-Hoeppli reaction (homogeneous eosinophilic material) and few giant cells, and cell debris among gill filament with some bacteria observed in F3. Several aneurysmal dilation/telangiectasia observed (F1, F2, F4).

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Skin & Muscle: Focal absence of epidermal layer, dermatitis with presence of rod-shape bacteria (F1), mild myositis (F1, F3, F4).

Heart: Few clusters of Gram-negative aggregates of rod-shape bacteria (resembles *Aeromonas* sp.) (F5). Compact layer displayed musculature degeneration (F5). One thrombus observed in F2. Epicarditis, minor (F1, F4).

Gut and pyloric caeca: Peritonitis (F3, F4).

Pancreas: No abnormalities detected.

Liver: Some perivascular cuffing (F1). F3 exhibited granulomatous inflammation displaying centrally Splendore-Hoeppli reaction (homogeneous eosinophilic material) and multinucleated giant cells, mild, multifocal.

Kidney: F3 exhibited granulomatous inflammation displaying centrally Splendore-Hoeppli reaction (homogeneous eosinophilic material) and multinucleated giant cells. F5 exhibited interstitial necrosis, mild, multifocal, with dense aggregates of Gram-negative bacteria resembling *Aeromonas* sp. Some increase in the numbers of aggregates of melanomacrophages (F1, F4). Increased number of basophilic nuclei (F2).

Spleen: F5 exhibited parenchymal necrosis, mild, multifocal, with dense aggregates of Gram-negative bacteria resembling *Aeromonas* sp. F3 displayed Granulomatous inflammation with a central Splendore-Hoeppli reaction (homogeneous eosinophilic material). Increased number of basophilic nuclei (F2). Slightly congested (F4).

Brain: Not sampled.

Eye: Not sampled.

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

Signed:



Date: 25/03/2026

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at [Fish Health Inspectorate Service Charter - gov.scot \(www.gov.scot\)](http://www.gov.scot)

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Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0119	Date of visit:	16/12/2025
Site no:	FS0605	Site name:	Creag an T'Sagairt (Loch Hourn)
Case no:	20250501	Inspector:	██████████

Case completion report

During the site inspection on 16th December 2025, it was discovered that an unexpected quantity of wrasse had been transferred onto site during a salmon input from another seawater site. The following points were raised with the site representative:

- No mortality records were available for the wrasse that were moved onto site 14th and 15th December.
- No movement records available for the wrasse that were moved onto site during 14th and 15th December.

The required records have now been provided to the Fish Health Inspectorate.

This case will now be closed. This site may be subject to further audit and recommendations in the future.

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

Signed: ██████████

Date: 11/05/2026

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at [Fish Health Inspectorate Service Charter - gov.scot \(www.gov.scot\)](http://www.gov.scot)

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