

# **B-survey at Hvannadalur, April 2025 (fallow period), Arctic Sea Farm ehf**

**Akvaplan-niva AS Report:  
APN 66615.B01**



# B survey at Hvannadalur April 2025 (fallow period), Arctic Sea Farm ehf

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## Summary

Sediment was recovered at all 20 stations (100% soft bottom). The sediments consisted primarily of clay in the whole near zone of the fish farm. Fauna was recorded to be present at all stations mainly in the form of polychaetes. No smell of H<sub>2</sub>S was recorded at 18 sampling stations and light smell at 2 sampling stations. There were no signs of out-gassing. The substrate was light/grey colour at all 20 stations. Grab was full at all stations despite trying to slow decent rate during the last meters when lowering the grab.

Based on the classification of sediment chemistry (pH/Eh) and the sensory assessment all twenty stations received status 1 - "Very good" Overall, the index score for parameter III (sensory parameters) were comparable with the index score for the parameter II (pH/Eh) 0.00 and index score for parameter III 0.48 (higher for parameter III mainly due to full grab at all stations).

In summary, the site receives the environmental status 1 - "Very good" (average group II-III index =0.24).

## Approval

  
Project Manager

  
Quality Control

## Key information

Site details and license holder information			
Site name	Hvannadalur	Site coordinates	65°39.222' N 24°00.894' V
County	Vesturbyggð	Municipality	Tálknafjörður
MTB (estimated max biomass)	7.250 tonnes	Operations Manager / Contact	Guðmundur Ólafsson
License holder / customer	Arctic Sea Farm		

Production status on date of survey			
Biomass at site	0 tonnes	Total feed use	0 tonnes
Farmed species	Salmon	Total biomass produced	0 tonnes
Type/time of survey	Indicated with X		Comments Sampling during fallowing period prior to putting next generation smolt to sea. Fallowing period started 09.10.2024 (12 months).
Maximum organic load cf. chapter 7.9	<input type="checkbox"/>		
Follow-up survey	<input type="checkbox"/>		
Half maximum load	<input type="checkbox"/>		
Pre-stock	<input checked="" type="checkbox"/>		
Required by the state administrator - baseline survey	<input type="checkbox"/>		
Other	<input type="checkbox"/>		
Last fallowing period:	October 2024 - April 2025		

Results from B-survey in accordance with NS 9410:2016 (main results)			
Parameter group and index		Parameter group and status	
Gr. II. pH/Eh	0.00	Gr. II. pH/Eh	1
Gr. III. Sensory	0.48	Gr. III. Sensory	1
GR. II + III	0.24	GR. II+ III	1
Date of fieldwork	10.04 2025	Date of report	14.04 2025
Environmental status (NS 9410:2016):			<b>1</b>

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# 1 Introduction

The present survey was conducted by Akvaplan-niva AS on behalf of Arctic Sea Farm in connection with the company's fish farming activities at the site Hvannadalur in Tálknafjörður municipality in Vesturbyggð county.

The purpose of a B-survey is to document the environmental status in the near zone of a fish farm by evaluating sediment condition (chemistry, sensory and presence/absence of fauna) in accordance with NS 9410:2016.

The B-survey is a tool for trend monitoring and allows to assess the status of organic enrichment beneath the net pens at different stages of the production cycle.

Figure 1 shows a map of southern part of Vestfirðir where Hvannadalur farm is located.

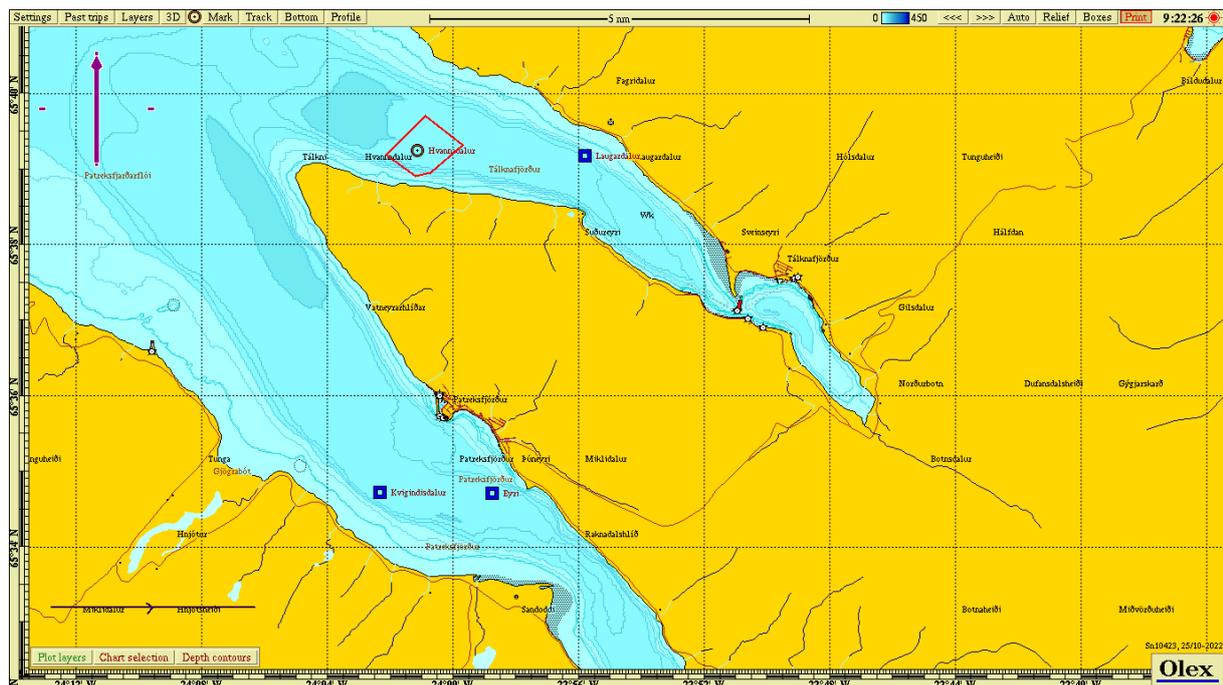


Figure 1. Overview map where Hvannadalur is marked by a red square. Other aquaculture sites in the nearest vicinity (Tálknafjörður and Patreksfjörður) are also shown with a smaller blue box and a name.

## 2 Methods

Monitoring of the environmental impact of fish farming activities on the seabed is standardised and regulated. All fish farming sites that are in use must be regularly assessed. This B-survey follows guidelines and methods outlined in NS 9410:2016 and ISO 12878. The Icelandic Environmental agency (Umhverfisstofnun) can also set specific requirements regarding frequency of surveys for different fish farming sites, which can overrule the above-mentioned standards.

The B survey is a trend monitoring tool with the focus on sediment condition (benthic impact) under and in the immediate vicinity of an aquaculture site. Sediment samples are taken using a grab (min. 250 cm<sup>2</sup>). Sediment condition for each sample is assessed applying three indicators: sediment chemistry (pH and redox potential), sensory evaluation (gas bubbles; smell, texture, colour of substrate and thickness of deposited sludge) and the presence or absence of fauna. The performance of these indicators against predefined thresholds allows to categorise the site into four different environmental statuses (Table 1), which are used to determine subsequent sampling frequency. The number of sampling stations is based on the site's allocated MTB, here the estimated max biomass of the current generation i.e. 7.250 ton (Personal reference, Hafsteinn Már Andersson, 2025).

Table 1. Frequency of B-survey based on environmental status at site.

Environmental status at maximum organic load (near zone)	Monitoring frequency for B survey
1-very good	At the next maximum load
2-good	Pre-stock and again at maximum load
3-poor	Pre-stock If the survey prior to restocking / end of following provides: Status 1 – survey should be carried out at next maximum load. Status 2 – survey should be carried out at half the maximum load and at the next maximum load. Status 3 – survey should be carried out at half the maximum load and at maximum load. Implementation of measures to reduce impact should be planned for the next production cycle. If any surveys show the environmental status to be 4 – "very poor", the site's environmental capacity has been exceeded.
4- very poor	Environmental capacity at site is exceeded. The authorities decide further measures.

The following equipment was used in this survey:

Grab: Van Veen grab (0.1 m<sup>2</sup>)

Sieve 1 mm: Akvaplan-niva

pH meter: Electrode, YSI Professional Plus

Redox meter: Electrode, YSI Professional Plus

Position determination – GPS map 62s

Digital camera

## 3 Site, production and survey design

### 3.1 Site characteristics and production

Hvannadalur is located in the south-western side of Tálknafjörður, approximately 4,5 nm northwest of the town of Tálknfjörður. The fish farm is a two-frame mooring system, each frame having 6 cages, total 12 cages each with 160 m circumference. During the previous production cycle all 12 cages were used. The mooring frame is positioned in northwesterly direction (45°) from land with depths below the cages ranging from 53 to 58 m.

Previously there have been farmed two generations fish at the site. During the last production cycle all twelve cages were used. The fallow period started on the 9<sup>th</sup> of October.

Table 2 shows production and feed use for the previous and current generations.

Table 2. Production and feed use for farm site Hvannadalur. Data provided by customer.

Generation of fish (G)	Production (tonnes)	Feed use (tonnes)
Generation 2022-2024	3.241 tonnes	3.829 tonnes
Preceding generation	7.366 tonnes	9.560 tonnes

### 3.2 Current and past surveys

Table 3 provides an overview on results and time of sampling for the last B-surveys at site.

Table 3. Present and previously conducted B-surveys at the site.

Date of sampling	Report number	Production status	Location condition
10.04 2025	APN-66615.B01	B-survey fallow period	1
29.08 2024	APN-66085.B01	B survey max biomass	1
05.09.2022	APN 64286.B01 (Gunnarsson, 2022)	Fallow period	1
09.07.2021	APN-62907.B01 (Gunnarsson, 2021)	B survey max biomass	1
15.07.2019	APN-61376.B01 (Gustavsson, 2019)	B survey new site	1

### 3.3 Hydrodynamic conditions

Measurement of dispersing current was done at the site in 24th of September – 29th of October 2020 measurements at 48 m depth (Hermansen, 2020). Dominating current (48 m) is in direction southeast (135 degrees). Average current speed was measured to be 6.4 cm/s. Highest current speed is measured to be 26.3 cm/s and 4.2 % of the measurements were < 1 cm/s.

### 3.4 Survey design

Sampling stations were placed following an assessment of site configuration and local environmental conditions, i.e. bathymetry and hydrodynamics. An overview of the total 20 sampling stations can be found in Figure 2 with coordinates and depth provided in Table 4. Sampling stations were placed to represent the environmental conditions within the near zone and cover thus both the deeper and shallower areas. The typical depth in the local impact zone is in the range from 54-59 m but in general the bathymetry under the farm is rather homogenous. Samples were collected from depths ranging from 55-58 metres. The client has stated that all cages at the site were used at some point during this production cycle (pers. Comm Hafsteinn Már Andersen). The station placement is

considered representative for an environmental survey of the farm's near-zone and in accordance with the requirements outlined in NS 9410:2016.

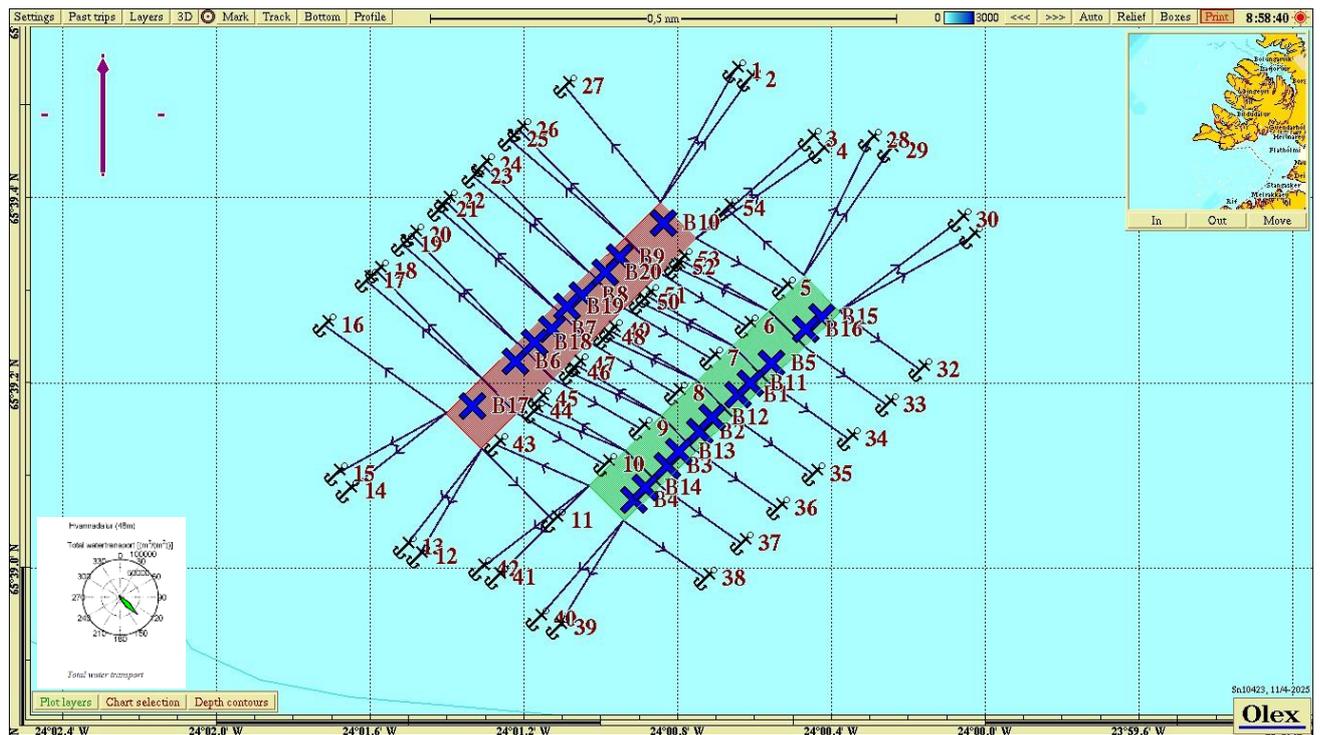


Figure 2. Overview map showing site configuration and local bathymetry at Hvannadalur. Sampling stations are marked by crosses and colour coded to visualise the environmental status at the respective station following the classification outlined in NS 9410:2016, chapter 7.11 (1 = blue, 2 = green, 3 = yellow, 4 = red). The current rose in the left corner shows the direction of water transport at dispersal depths at the site (Hermansen, 2020).

Table 4. Position and depth of the sampling stations of this survey.

Station number	Northing	Westing	Depth [m]
St 1	65°39,187	24°00,644	58
St 2	65°39,147	24°00,742	57
St 3	65°39,110	24°00,828	56
St 4	65°39,073	24°00,913	55
St 5	65°39,221	24°00,557	58
St 6	65°39,223	24°01,221	58
St 7	65°39,258	24°01,127	58
St 8	65°39,294	24°01,047	58
St 9	65°39,335	24°00,950	58
St 10	65°39,372	24°00,838	58
St 11	65°39,199	24°00,610	58
St 12	65°39,162	24°00,711	58
St 13	65°39,125	24°00,796	57
St 14	65°39,086	24°00,883	56
St 15	65°39,271	24°00,424	57
St 16	65°39,257	24°00,466	57
St 17	65°39,175	24°01,334	58
St 18	65°39,243	24°01,172	58
St 19	65°39,281	24°01,088	58
St 20	65°39,319	24°00,988	58

## 4 Results

Classified survey results for the different parameter categories as well as the assigned environmental status of the site are shown in Table 5. The complete survey assessment form with results and classifications for each station can be found in the attachment.

Table 5. Results from the environmental assessment of the near zone of Hvannadalur.

Parameter	Status
Group II parameters (pH/Eh)	1
Group III parameters (sensory)	1
Group II + III – parameters (mean)	1
Environmental status (site)	1

Sediment was recovered at all 20 stations (100% soft bottom). The sediments consisted primarily of clay in the whole near zone of the fish farm. Fauna was recorded to be present at all stations mainly in the form of polychaetes. No smell of H<sub>2</sub>S was recorded at eighteen sampling stations and light smell at two sampling stations. There were no signs of out-gassing. The substrate was light/grey colour at all twenty stations. Grab was full at all stations despite trying to slow decent rate during the last meters when lowering the grab.

Based on the classification of sediment chemistry (pH/Eh) and the sensory assessment all twenty stations received status 1 - "Very good" Overall, the index score for parameter III (sensory parameters) were comparable with the index score for the parameter II (pH/Eh) 0.00 and index score for parameter III 0.48 (higher for parameter III mainly due to full grab at all stations).

In summary, the site receives the environmental status 1 - "Very good" (average group II-III index =0.24).

## 5 Summary

Applying the indicator thresholds and classification outlined in NS 9410:2016 it is shown that the site Hvannadalur receives overall site status of 1 – "Very good" at the time of this B survey (fallow period). Samples were collected with a Van Veen grab (0.1 m<sup>2</sup>) at 20 stations distributed around the 12 cages in use during last production cycle. Sediment was successfully collected at all the 20 stations and all stations received status 1 – "Very good".

The survey presented here was undertaken at max biomass and the results indicate relatively little organic enrichment in the whole of the local impact zone.

Previous B surveys carried out at max biomass for last generation gave the site also an overall environmental status of 1 – Very good (Gunnarsson, 2024). In the 2024 survey nine stations received condition 1 – "Very good" and one station received condition 2 – "Good". In the present survey in 2025 all twenty stations had condition 1 – "Very good". Overall, these results indicate that there is rather little organic enrichment detectable in the local impact zone at the 2025 survey at Hvannadalur. The current 6-month fallow period has rather improved the condition based on the index scores and stations conditions.

**The site is given environmental status 1 – "Very good" following the criteria outlined in NS 9410:2016.**

## 6 References

Forskrift om drift av akvakulturanlegg (akvakulturdriftsforskriften) §§ 35 og 36.

Gunnarsson, S., 2024. B survey at Hvannadalur, August 2024 (max biomass), Arctic Sea Farm ehf.. APN report. nr. 66085.B01

Gunnarsson, S., 2022. Hvannadalur, Arctic Sea Farm. B survey (post fallow), September 2022. APN report. nr. 64286.B01

Gunnarsson, S., 2021. Hvannadalur, Arctic Sea Farm B-bottom survey, April 2021 (maximum biomass survey). APN report. nr. 62907.B01

Gústavsson, A., 2019. Hvannadalur, Arctic Sea Farm. B-bottom pre-survey, July 2019. APN report nr. 61376.B01.

Hermansen, S., 2020. Arctic Sea Farm hf. Current measurements at Hvannadalur, 2020. APN report nr. 62459.02.

ISO 12878:2012. Environmental monitoring of the impacts from marine finfish farms on soft bottom.

ISO 5667-19:2004. Guidance on sampling of marine sediments.

Norsk Standard NS 9410:2016. Miljøovervåking av bunnpåvirkning fra marine akvakulturanlegg.

Personal reference. Hafsteinn Már Andersson, IT specialist, Arctic Sea Farm. 2025.

# 7 Attachments

## 7.1 Form (B.1 and B.2) NS 9410:2016

Sample scheme B.1																
Company		Arctic Sea Farm														
Site:		Hvannadalur														
Fieldworker:		Snorri Gunnarsson														
Date:		10.04 2025														
Site no.:		SiteItem.LokalitetsID														
Gr	Parameter	Point	Sample number													
			1	2	3	4	5	6	7	8	9	10				
	Bottom type: S (soft) eller H (hard)		S	S	S	S	S	S	S	S	S	S				
I	Animals > 1mm	Yes (0) No (1)	0	0	0	0	0	0	0	0	0	0				
II	pH	value	7,59	7,48	7,59	7,64	7,66	7,30	7,69	7,72	7,61	7,59				
	Eh (mV)	ORP	233	206	98	143	218	199	202	215	223	219				
		plus ref. verdi	433	406	298	343	418	399	402	415	423	419				
	pH/Eh	from figure	0	0	0	0	0	0	0	0	0	0				
Status station			1	1	1	1	1	1	1	1	1	1				
Buffer-temp			8,0 C				Sea temp			3,4 C		Sediment temp		4,3 C		
pH sea			8,01		ORP sea			232,0 mV		Eh sea		432,0 mV		Reference electrode		200,0 mV
III	Gas bubbles	Yes (4) No (0)	0	0	0	0	0	0	0	0	0	0				
	Colour	Light/grey (0)	0	0	0	0	0	0	0	0	0	0				
		Brown/black (2)														
	Smell	None (0)	0	0	0	0	0	0	0	0	0	0				
		Light (2)														
		Strong (4)														
	Consistency	Solid (0)	0	0	0	0	0	0	0	0	0	0				
		Soft (2)														
		Aqueous (4)														
	Grab volume (v)	v < 1/4 (0)														
		1/4 < v < 3/4 (1)														
		v > 3/4 (2)	2	2	2	2	2	2	2	2	2	2				
	Thickness of sludge (t)	t < 2 cm (0)	0	0	0	0	0	0	0	0	0	0				
2 < t < 8 cm (1)																
t > 8 cm (2)																
Sum			2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0				
Corrected (*0,22)			0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4				
Status station			1	1	1	1	1	1	1	1	1	1				
Average group II & III			0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2				
Status station			1	1	1	1	1	1	1	1	1	1				
Grab ID	K3															
pH / Eh ID	Ysi professional plus															

# Sample scheme B.1

Company:	Arctic Sea Farm
Site:	Hvannadalur
Fieldworker:	Snorri Gunnarsson

Date:	10.04 2025
Site no.:	eltem.Lokalitets

Gr	Parameter	Point	Sample number										Index		
			11	12	13	14	15	16	17	18	19	20	S%	H%	
	Bottom type: S (soft) or H (hard)		S	S	S	S	S	S	S	S	S	S	100	0	
I	Animals > 1mm	Yes (0) No (1)	0	0	0	0	0	0	0	0	0	0			
II	pH	value	7,62	7,56	7,55	7,58	7,61	7,71	7,59	7,50	7,66	7,64			
	Eh (mV)	ORP	212	177	158	135	231	207	187	154	213	223			
		plus ref. verdi	412	377	358	335	431	407	387	354	413	423			
	pH/Eh	from figure	0	0	0	0	0	0	0	0	0	0	0,00		
	Status station			1	1	1	1	1	1	1	1	1			
	Status group II			1	Buffer temp	8,0 C		Sea temp	3,4 C		Sediment temp	4,3 C			
	pH sea		8,01	ORP sea	232 mV		Eh sea	432 mV		Reference electrode	200 mV				
	III	Gas bubbles	Yes (4) No (0)	0	0	0	0	0	0	0	0	0	0		
		Colour	Light/grey (0)	0	0	0	0	0	0	0	0	0	0		
			Brown/black (2)												
Smell		None (0)	0	0	0		0	0	0		0	0			
		Light (2)				2				2					
		Strong (4)													
Consistency		Solid (0)	0	0	0	0	0	0	0	0	0	0			
		Soft (2)													
		Aqueous (4)													
Grab volume (v)		v < 1/4 (0)													
	1/4 < v < 3/4 (1)														
	v > 3/4 (2)	2	2	2	2	2	2	2	2	2	2				
Thickness of sludge (t)	t < 2 cm (0)	0	0	0	0	0	0	0	0	0	0				
	2 < t < 8 cm (1)														
	t > 8 cm (2)														
Sum			2,0	2,0	2,0	4,0	2,0	2,0	2,0	4,0	2,0	2,0			
Corrected (*0,22)			0,4	0,4	0,4	0,9	0,4	0,4	0,4	0,9	0,4	0,4	0,48		
Status station			1	1	1	1	1	1	1	1	1	1			
Status group III			1												
Average group II & III			0,2	0,2	0,2	0,4	0,2	0,2	0,2	0,4	0,2	0,2	0,24		
Status station			1	1	1	1	1	1	1	1	1	1			
Status group II & III			1												
pH/Eh															
Corr.sum															
Index															
Average															
< 1,1													1		
1,1 - <2,1													2		
2,1 - <3,1													3		
≥3,1													4		
Status site:												1			

Grab ID	K3
pH / Eh ID	Ysi professional plus

## Sample scheme B.2

Company:	Arctic Sea Farm
Site:	Hvannadalur
Fieldworker:	Snorri Gunnarsson

Date:	10.04 2025
Site no.:	{{SiteItem.LokalitetsID}}

Sample number	1	2	3	4	5	6	7	8	9	10
Depth (m)	58	57	56	55	58	58	58	58	58	58
Number of trials	1	1	1	1	1	1	1	1	1	1
Gas bubbles (in sample)	No	No	No	No	No	No	No	No	No	No
Sediment type	Clay	X	X	X	X	X	X	X	X	X
	Silt									
	Sand									
	Gravel									
	Shellsand									
Reef										
Rocky bottom (cobbles, boulders)										
Echinodermata, count					3	1				
Crustaceans, count										
Molluscs, count							32	1	7	
Polychaetes, count	>30	>40	>10	4	5	>10	5	3	>20	>10
Other animals, count										
<i>Beggiatoa</i>										
Feed										
Faeces										
Comments										
Grab	Area [m <sup>2</sup> ]	0,1			Grab ID	K3				
page 3 of 4 pages										

## Sample scheme B.2

Company:	Arctic Sea Farm
Site:	Hvannadalur
Fieldworker:	Snorri Gunnarsson

Date:	10.04 2025
Site no.:	{{SiteItem.LokalitetsID}}

Sample number	11	12	13	14	15	16	17	18	19	20
Depth (m)	58	58	57	56	57	57	58	58	58	58
Number of trials	1	1	1	1	1	1	1	1	1	1
Gas bubbles (in sample)	No	No	No	No	No	No	No	No	No	No
Sediment type	Clay	X	X	X	X	X	X	X	X	X
	Silt									
	Sand									
	Gravel									
	Shellsand									
Reef										
Rocky bottom (cobble, boulders)										
Echinodermata, count										2
Crustaceans, count										
Molluscs, count							3		1	1
Polychaetes, count	>20	>20	>10	4	>20	>20	>20	3	>10	>10
Other animals, count										
Beggiatoa										
Feed										
Faeces										
Comments										

Grab	Area [m <sup>2</sup> ]	0,1	Grab ID	K3
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Signature fieldworker:  page 4 of 4 pages

## 7.2 Images of samples at Hvannadalur

<i>St</i>	<i>Image before sieving</i>	<i>Image after sieving</i>
<i>St 1</i>	 A photograph of a yellow bucket containing dark, clumpy sediment. A white label with the number '1' is placed on top of the sediment.	 A photograph of a sieve containing the material from sample St 1. The material is dark and granular. A white label with the number '1' is placed in the center of the sieve.
<i>St 2</i>	 A photograph of a yellow bucket containing dark, clumpy sediment. A white label with the number '2' is placed on top of the sediment.	 A photograph of a sieve containing the material from sample St 2. The material is dark and granular. A white label with the number '2' is placed in the center of the sieve.
<i>St 3</i>	 A photograph of a yellow bucket containing dark, clumpy sediment. A white label with the number '3' is placed on top of the sediment.	 A photograph of a sieve containing the material from sample St 3. The material is dark and granular. A white label with the number '3' is placed in the center of the sieve.
<i>St 4</i>	 A photograph of a yellow bucket containing dark, clumpy sediment. A white label with the number '4' is placed on top of the sediment.	 A photograph of a sieve containing the material from sample St 4. The material is dark and granular. A white label with the number '4' is placed in the center of the sieve.
<i>St 5</i>	 A photograph of a yellow bucket containing dark, clumpy sediment. A white label with the number '5' is placed on top of the sediment.	 A photograph of a sieve containing the material from sample St 5. The material is dark and granular. A white label with the number '5' is placed in the center of the sieve.

<p><b>St 6</b></p>	 <p>An orange plastic bin containing a dark, irregularly shaped sample. A white label with the number '6' is placed on top of the sample.</p>	 <p>A petri dish containing a dark, granular sample. A white label with the number '6' is placed on the surface of the sample.</p>
<p><b>St 7</b></p>	 <p>An orange plastic bin containing a dark, irregularly shaped sample. A white label with the number '7' is placed on top of the sample.</p>	 <p>A petri dish containing a dark, granular sample. A white label with the number '7' is placed on the surface of the sample.</p>
<p><b>St 8</b></p>	 <p>An orange plastic bin containing a dark, irregularly shaped sample. A white label with the number '8' is placed on top of the sample.</p>	 <p>A petri dish containing a dark, granular sample. A white label with the number '8' is placed on the surface of the sample.</p>
<p><b>St 9</b></p>	 <p>An orange plastic bin containing a dark, irregularly shaped sample. A white label with the number '9' is placed on top of the sample.</p>	 <p>A petri dish containing a dark, granular sample. A white label with the number '9' is placed on the surface of the sample.</p>
<p><b>St 10</b></p>	 <p>An orange plastic bin containing a dark, irregularly shaped sample. A white label with the number '10' is placed on top of the sample.</p>	 <p>A petri dish containing a dark, granular sample. A white label with the number '10' is placed on the surface of the sample.</p>

<p><i>St 11</i></p>	 An orange plastic bucket containing a dark, moist, clumpy soil sample. A small white label with the number '11' is placed on top of the soil.	 A circular sieve residue for sample 11, showing a mixture of dark soil particles and lighter-colored mineral grains.
<p><i>St 12</i></p>	 An orange plastic bucket containing a dark, moist, clumpy soil sample. A small white label with the number '12' is placed on top of the soil.	 A circular sieve residue for sample 12, showing a mixture of dark soil particles and lighter-colored mineral grains.
<p><i>St 13</i></p>	 An orange plastic bucket containing a dark, moist, clumpy soil sample. A small white label with the number '13' is placed on top of the soil.	 A circular sieve residue for sample 13, showing a mixture of dark soil particles and lighter-colored mineral grains.
<p><i>St 14</i></p>	 An orange plastic bucket containing a dark, moist, clumpy soil sample. A small white label with the number '14' is placed on top of the soil.	 A circular sieve residue for sample 14, showing a mixture of dark soil particles and lighter-colored mineral grains.
<p><i>St 15</i></p>	 An orange plastic bucket containing a dark, moist, clumpy soil sample. A small white label with the number '15' is placed on top of the soil.	 A circular sieve residue for sample 15, showing a mixture of dark soil particles and lighter-colored mineral grains.

<p><b>St 16</b></p>	 <p>A photograph showing a dark, irregularly shaped sample labeled '16' inside an orange plastic container. The sample appears to be a piece of material, possibly a rock or sediment, with some lighter-colored inclusions.</p>	 <p>A photograph showing the same sample labeled '16' after being passed through a sieve. The material is now a fine, dark, granular powder, with a small amount of larger, lighter-colored particles still visible.</p>
<p><b>St 17</b></p>	 <p>A photograph showing a dark, irregularly shaped sample labeled '17' inside an orange plastic container. The sample is similar in appearance to the one in St 16.</p>	 <p>A photograph showing the same sample labeled '17' after being passed through a sieve. The material is a fine, dark, granular powder, similar to the one in St 16.</p>
<p><b>St 18</b></p>	 <p>A photograph showing a dark, irregularly shaped sample labeled '18' inside an orange plastic container. The sample is similar in appearance to the others.</p>	 <p>A photograph showing the same sample labeled '18' after being passed through a sieve. The material is a fine, dark, granular powder, similar to the others.</p>
<p><b>St 19</b></p>	 <p>A photograph showing a dark, irregularly shaped sample labeled '19' inside an orange plastic container. The sample is similar in appearance to the others.</p>	 <p>A photograph showing the same sample labeled '19' after being passed through a sieve. The material is a fine, dark, granular powder, similar to the others.</p>
<p><b>St 20</b></p>	 <p>A photograph showing a dark, irregularly shaped sample labeled '20' inside an orange plastic container. The sample is similar in appearance to the others.</p>	 <p>A photograph showing the same sample labeled '20' after being passed through a sieve. The material is a fine, dark, granular powder, similar to the others.</p>

### 7.3 3D-bathymetry

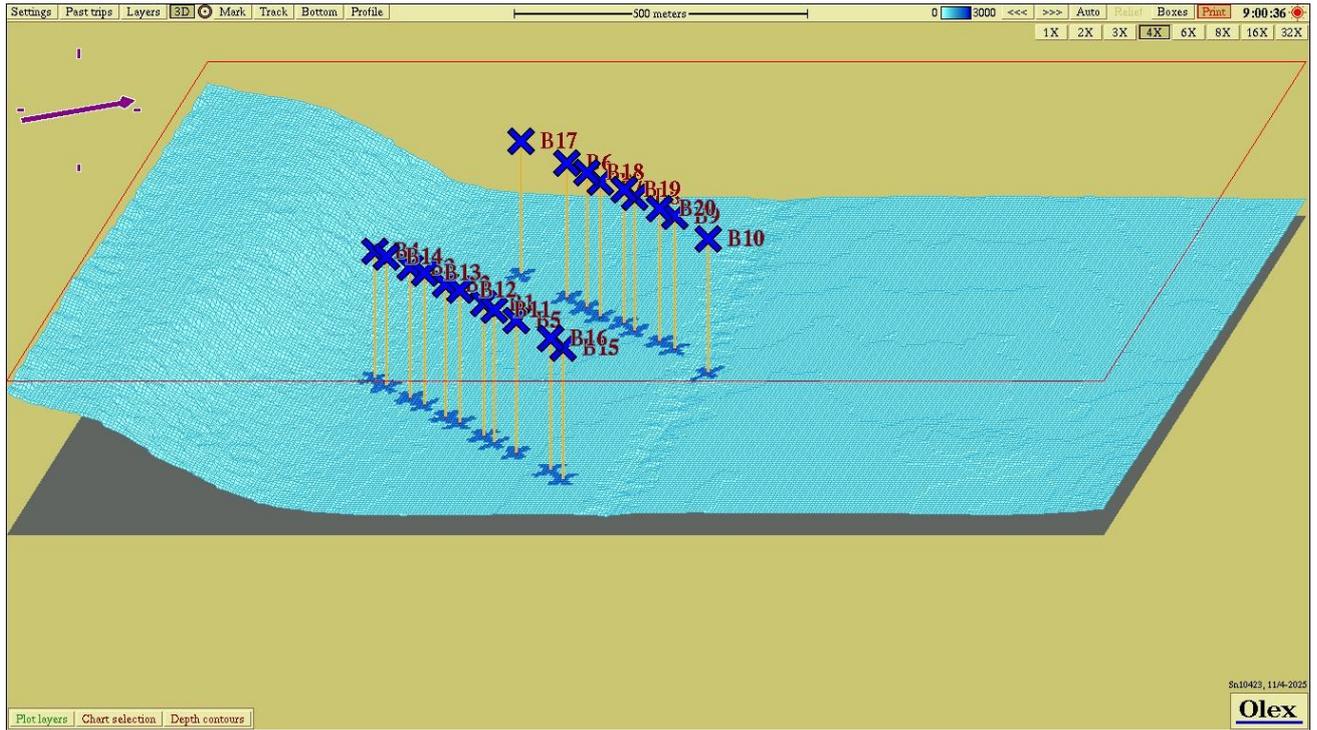


Figure 3. 3D-view of bathymetry at Hvannadalur with stations as shown in Figure 2 and Table 4.