

MachairWind Offshore Windfarm

Appendix 7.3 Phase 1 Geophysical and Habitat Interpretative Report





MachairWind 2023 Geophysical and Environmental Survey

MachairWind Offshore Windfarm

Survey Period: 22 August to 8 November 2023

Volume 3 of 7: Geophysical and Habitat Interpretative Report

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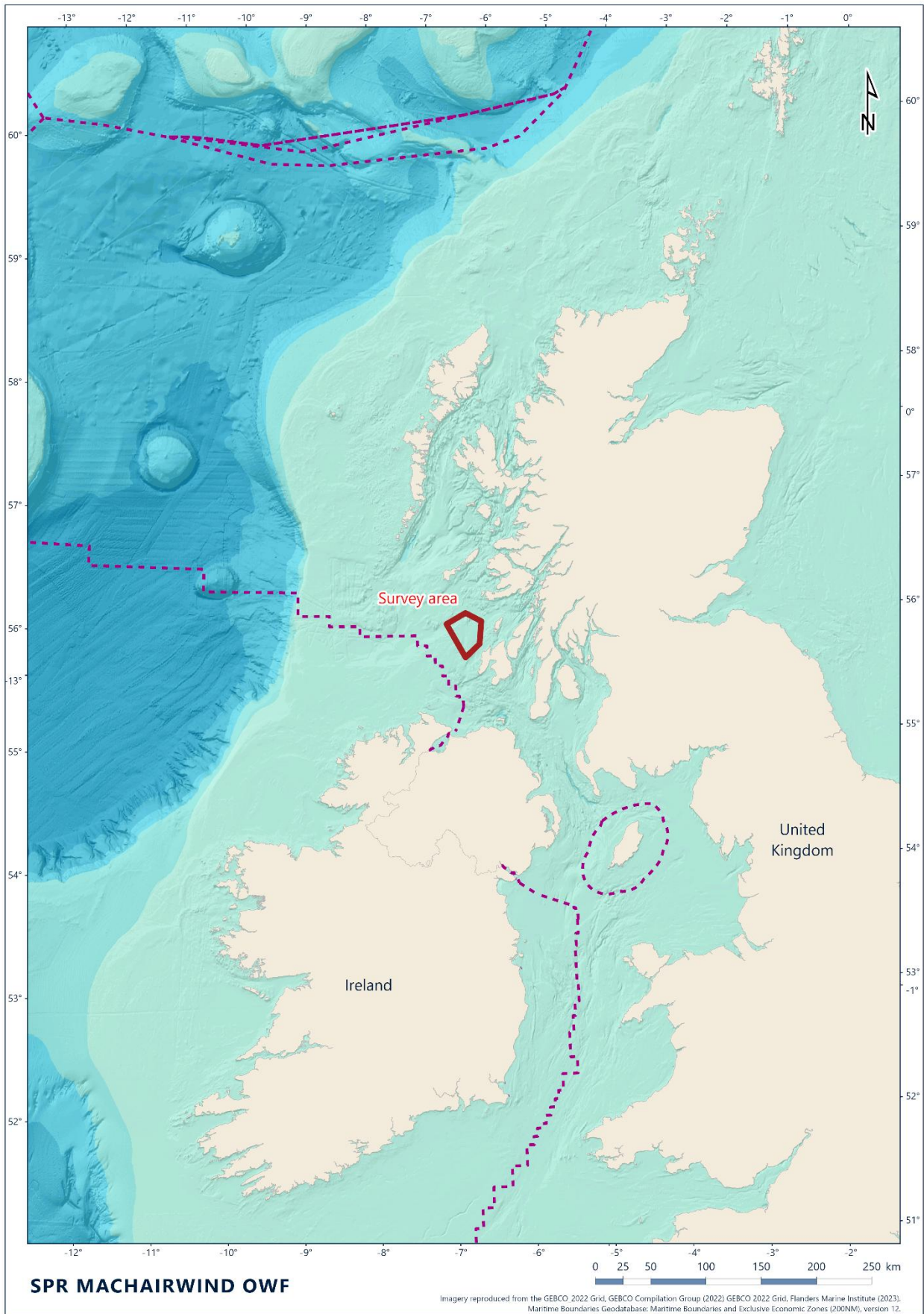
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Frontispiece



Executive Summary

On the instruction of MachairWind Ltd, Fugro performed a preliminary geophysical and environmental characterisation site survey at the proposed MachairWind Offshore Windfarm, located in the Atlantic Ocean north-west of Islay and west of Colonsay. The survey operations were performed onboard the MV Fugro Galaxy during the period 22 August to 8 November 2023 .

Survey Area

The survey area was divided into four blocks (A-D) and surveyed on a wide line spacing (500 m x 2 km grid spacing). The survey area is approximately 754 km². Water depths range from 30 m to 130 m.

The MachairWind Offshore Windfarm geophysical site survey consisted of a shallow geophysical and 2D ultra high resolution (2D-UHR) seismic survey. The integrated survey initial program comprised 68 mainlines with 500 m spacing, and 16 crosslines with 2000 m spacing.

To optimise the project plan as well as aid data management and issuance of deliverables, the survey program was divided into 4 blocks (A-D). All lines were acquired with multibeam echosounder, dual frequency side scan sonar, deep tow sparker with GeoEel multichannel streamer, Innomar sub-bottom profiler, and magnetometer.

Bathymetry

Table S.1: Summary of bathymetry across the MachairWind OWF survey area

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W		
Minimum water depth	21.5 m LAT	associated with bedrock outcrops around the Dudh Artach lighthouse (647 458 E, 6 221 059 N)
Maximum water depth	119 m LAT	Associated with large area of scour immediately east of the bedrock outcrop around the lighthouse (649 385 E, 6 222 230 N)
Average (natural) gradient	<1°	
Maximum gradient	83°	Associated with bedrock outcrops (649 012 E, 6 214 216 N)
Notes LAT = Lowest Astronomical Tide		

Seafloor Sediment Classification

The seafloor sediments within the survey area were classified into two types, sand with shell fragments and coarse to- gravely-sand, gravels, cobbles, and boulders.

Seafloor Morphology

Bathymetric highs around bedrock and 'Till' outcrops were identified, with broader bathymetric highs in the north (Dudh Artach lighthouse) and south of the survey area.

Four types of depositional features were identified within the survey area, sand ripples, mega ripples, sand waves and sand dunes (all flow-transverse bedforms).

Large erosional scours are identified to the north and west of the Dudh Artach lighthouse.

A large north-north-east to south-south-west trending depression is identified in the centre of the survey area.

Localised depressions enclosing areas of high reflectivity sediment were identified across the site.

Seafloor Contacts

A total of 4172 boulders were identified outside of areas of numerous boulders (40 or more boulders per 100 m²). A further 4470 boulders were picked within the areas of numerous boulders to indicate size distribution therein. The total area identified as areas of numerous boulders was 13.953 km².

A total of 44 contacts were identified as items of suspected debris, of which 11 were identified as linear debris. One wreck was found within the survey area.

A total of 72 magnetic anomalies were identified within the survey area. The magnetic anomalies had amplitudes up to 97.7 nT. None of the magnetic anomalies had a cross correlation with items of debris, identified from the SSS or MBES data.

Shallow Gas

No expression of shallow gas at the seafloor were found in the existing data within the MachairWind OWF survey area.

Seafloor Habitats

The results of the geophysical interpretation and the video and photographic analysis were reviewed, in conjunction with the physical and biological characteristics identified from grab sampling, to provide a comprehensive habitat assessment.

The main habitat assigned within the survey area and at the reference station, based on the photographic, macrofaunal and particle size distribution (PSD) data, was the Joint Nature Conservation Committee (JNCC) level 4 habitat type 'Offshore circalittoral sand' (SS.SSa.OSa). This is consistent with the European Marine Observation and Data Network (EMODnet) habitat map of the area and immediate surroundings. Areas with gravelly sand, shell fragments, pebbles and infrequent cobbles were observed and classified as patches of the JNCC level 4 habitat type 'Offshore circalittoral coarse sediment' (SS.SCS.OCS). Where numerous cobbles and large boulders occurred, the habitat type assigned was 'Echinoderms and crustose communities' (CR.MCR.EcCr). One section of transect MCW-D-ST73 was classified as a mosaic of 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) with 'Echinoderms and crustose communities on' (CR.MCR.EcCr).

Epibenthic fauna observed included hermit crabs (Paguroidea), crabs (*Cancer pagurus* and *Necora puber*), brittlestars (Ophiuroidea), starfish (Asteroidea including *Asterias rubens*, *Astropecten irregularis*, *Crossaster papposus*, *Marthasterias glacialis* and *Luidia sarsii*), sea urchins (*Echinus esculentus*), soft corals (*Alcyonium digitatum*) and rays (Rajiformes). Fish (Osteichthyes including *Callionymus* sp., *Scomber scombrus*, *Clupea harengus* and *Merlangius merlangus*) and flatfish (Pleuronectiformes including *Microchirus variegatus*, *Buglossidium luteum*, *Pleuronectes platessa* and *Limanda limanda*) were also observed.

Potentially Sensitive Habitats or Species

Five stations were assessed for the presence of the Annex I habitat 'Reef' (geogenic). Assessments ranged from 'not a reef' to 'medium reef', with no areas of 'high reef' observed. Areas of potential stony reef of more than 25 m² were observed on transects MCW-D-73, MCW-D-82 and MCW-C-ST83 (comprised of a 'low reef' to 'medium reef' mosaic, with a notable area of 'medium reef' on the latter). Whilst reef mosaics satisfied the area criterion, a strong justification is required for low reef to be considered as Annex I stony reef.

The presence of the habitat types 'Circalittoral coarse sediment' (SS.SCS.CCS) and 'Offshore circalittoral sand' (SS.SSa.OSa) indicates the occurrence of the priority marine feature (PMF) broad habitats 'Subtidal sands and gravels' and 'Offshore subtidal sands and gravels', which are amongst the most common habitats in the UK offshore marine environment.

Adult and juvenile Ocean Quahogs *Arctica islandica*, an Oslo and Paris Commission (OSPAR) threatened species, were recorded at 18 stations from grab sampling and observed within 18 stations in photographic data.

Individuals belonging to the family Gadidae were observed in photographic data, indicating the potential presence of the Atlantic cod *Gadus morhua*, an OSPAR declining species.

Rays of the family Rajidae were also observed in photographic data, indicating the potential presence of the thornback ray *Raja clavata*, the spotted ray *R. montagui* and the undulate ray *R. undulata*. The presence of the thornback ray was confirmed with an observation at station MCW-A-ST02.

Individuals of the species *Ammodytes marinus*, a UK Biodiversity Action Plan (BAP) priority species, were recorded by the grab sampling. The family Ammodytidae was identified in photographic data, indicating the possible presence of the sand eels *A. tobianus*, a priority marine feature (PMF).

Other UK BAP species, PMF or OSPAR threatened and declining species recorded within the survey area included: plaice (*Pleuronectes platessa*), mackerel (*Scomber scombrus*), whiting (*Merlangius merlangus*) and herring (*Clupea harengus*).

Except for the Ocean Quahog *A. islandica*, the undulate ray (*R. undulata*) and the spotted ray (*R. montagui*), these species were also listed in the Scottish biodiversity list. Within European waters, all the fish species and *R. undulata* were 'Least Concern' International Union for Conservation of Nature (IUCN) species, with *A. tobianus* being assessed as 'Data Deficient', *R. clavata* as near threatened and *R. montagui* as endangered.

No other Annex I habitats or Annex II species, OSPAR threatened and/or declining species and habitats, or UK Priority Habitats and Species and Scottish biodiversity list species and habitats were observed within the survey areas.

Document Arrangement

Volume No.	Volume Title	Fugro Document No.
Volume 1	Geophysical Field Operations Report	230633-MachairWind-V1
Volume 2	Final Processing Report	230633-MachairWind-V2
Volume 3	Final offshore wind farm geophysical habitat interpretative report	230633-MachairWind-V3
Volume 4	Final offshore wind farm geophysical results report	230633-MachairWind-V4
Volume 5	Final offshore windfarm benthic survey interpretive report	230633-MachairWind-V5
Volume 6	Final offshore windfarm contaminant chemical analysis technical report	230633-MachairWind-V6
Volume 7	Final eDNA report with laboratory analysis	230633-MachairWind-V7

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Guidelines on Use of Report

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Abbreviations

2D-UHR	2D ultra high resolution
BAP	Biodiversity Action Plan
BGS	British Geological Survey
BSH	Broad-scale habitats
CBD	Convention on Biological Diversity
CM	Central Meridian
CRP	Central reference position
DTM	Digital terrain model
DVV	Dual van Veen grab
eDNA	environmental Deoxyribonucleic Acid
EEA	European Environment Agency
EIA	Environmental Impact Assessment
EMODnet	European Marine Observation and Data Network
EOL	End of line
ETRS89	European Terrestrial Reference System 1989
EU	European Union
EUNIS	European Nature Information System
FA	Faunal sample A
GES	Good environmental status
GNSS	Global Navigation Satellite System
GRS	Geodetic Reference System
HC	Hydrocarbon sample
HCA1/HCA2	Hydrocarbon sample 1 or 2
HF	High frequency
HG	Hamon grab
HM	Heavy metal sample
HMA1/HMA2	Heavy metal sample 1 or 2
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
LED	Light-emitting diode
LF	Low frequency

MBES	Multibeam echosounder
MCZ	Marine Conservation Zone
MPA	Marine protected area
MSS	Mean Sea Surface
MV	Motor vessel
NCMPA	Nature Conservation Marine Protected Area
NF	No fix
NS	No sample
OSPAR	Oslo and Paris Commission
OWF	Offshore Wind Farm
PC	Physico-chemical sample
PEP	Project execution plan
PMF	Priority marine feature
PSD	Particle size distribution
PSDA1/PSDA2	Particle size distribution sample 1 or 2
SAC	Special Area of Conservation
SACFOR	Superabundant, abundant, common, frequent, occasional and rare (semi-quantitative abundance scale)
SBES	Single beam echosounder
SOL	Start of line
SOW	Scope of work
SPA	Special Protection Area
SSS	Side scan sonar
TM	Transverse Mercator
UHR	Ultra high resolution
USBL	Ultra-short baseline
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
VORF	Vertical Offshore Reference Frame
WGS84	World Geodetic System 1984
WS	Water sample

1. Introduction

1.1 General Project Description

On the instruction of MachairWind Ltd, Fugro performed a preliminary geophysical and environmental characterisation site survey at the proposed MachairWind Offshore Windfarm, located in the Atlantic Ocean north-west of Islay and west of Colonsay. The survey operations were performed onboard the MV Fugro Galaxy during the period 22 August to 8 November 2023 .

The survey area was approximately 754 km², in water depths ranging from 21.5m to 119m. The survey area was divided into four blocks (A-D) and surveyed on a wide line spacing (500 m x 2 km grid spacing). The blocks were devised to best work with the fisheries in the area and allowed for fishing gear to be removed from a block prior to the vessel arriving to proceed with acquisition.

The final acquisition order of the blocks was A>C>B>D. Lines scheduled to be re-run due to data quality issues from block B have been completed last. A 1 km buffer was employed around the site to allow for line turns to be completed.

The main project objectives were:

- Collect, interpret, and report on the data in order to meet the expectations of the Client to provide data for the Environmental Impact Assessment (EIA) and related marine license documents.
- Obtain accurate water depths to aid in the design of equipment.
- Obtain seafloor morphology information, including identification of relevant seabed features and anthropogenic objects.
- Acquire sub-seafloor data that will enable detection and delineation of shallow seabed and sub-seabed geohazards that may have an impact of development of an offshore wind project.
- Collect data on the benthic infauna and epifauna, and sediment characteristics of the survey area to identify any areas of potential conservation importance, such as those containing threatened or declining habitats and species.

Survey operations were comprised of geophysical and environmental data acquisition.

1.2 Geophysical Survey

The MachairWind Offshore Windfarm geophysical site survey consisted of a shallow geophysical and 2D ultra high resolution (2D-UHR) seismic survey. The integrated survey initial program comprised 68 mainlines with 500 m spacing, and 16 crosslines with 2000 m spacing.

To optimise the project plan as well as aid data management and issuance of deliverables, the survey program was divided into 4 blocks (A-D). All lines were acquired with multibeam echosounder (MBES), dual frequency side scan sonar (SSS), deep tow sparker with GeoEel multichannel streamer, Innomar sub-bottom profiler, and magnetometer. An image of the combined survey line plan is presented in Figure 1.2.

Due to the weather conditions on site, and limited time at the end of the project, a number of mainlines were either dropped from the survey or were rejected due to data quality and not re-run. As a result, 57 of the 68 mainlines were surveyed during the project with most of the non-surveyed lines being in block D. Additionally due to the 1 km buffer creating tight line turns, some lines had reduced SSS and magnetometer coverage. Further details to any changes to the scope of work are outlined in section 1.4.

Table 1.1 defines the surface coordinates of the corner locations for each of the blocks at MachairWind OWF.

Table 1.1: Corner location coordinates for the blocks at MachairWind OWF

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Block A	Easting	Northing	Latitude	Longitude
A1	627,181.65	6,217,830.50	56° 5.31968' N	6° 57.35613' W
A2	644,309.15	6,227,853.71	56° 10.42692' N	6° 40.52864' W
A3	650,992.84	6,224,403.66	56° 8.44453' N	6° 34.19283' W
A4	632,344.82	6,208,795.63	56° 0.36834' N	6° 52.64860' W
Block B	Easting	Northing	Latitude	Longitude
B1	632,344.82	6,208,795.63	56° 0.36834' N	6° 52.64860' W
B2	650,992.84	6,224,403.66	56° 8.44453' N	6° 34.19283' W
B3	657,867.47	6,220,856.47	56° 6.40071' N	6° 27.68743' W
B4	635,950.55	6,202,487.08	55° 56.90936' N	6° 49.37282' W
Block C	Easting	Northing	Latitude	Longitude
C1	635,950.55	6,202,487.08	55° 56.90936' N	6° 49.37282' W
C2	657,867.47	6,220,856.47	56° 6.40071' N	6° 27.68743' W
C3	658,620.44	6,220,467.77	56° 6.17642' N	6° 26.97561' W
C4	657,993.70	6,211,784.92	56° 1.51262' N	6° 27.88695' W
C5	639,483.03	6,196,307.37	55° 53.51967' N	6° 46.17291' W

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Block D	Easting	Northing	Latitude	Longitude
D1	639,483.03	6,196,307.37	55° 53.51967' N	6° 46.17291' W
D2	657,993.70	6,211,784.92	56° 1.51262' N	6° 27.88695' W
D3	657,146.31	6,200,038.41	55° 55.20292' N	6° 29.11311' W
D4	644,440.30	6,187,629.57	55° 48.75753' N	6° 41.69801' W
Notes Coordinates extracted from supplied line plan file (MCW_W1_Lineplan.shp)				

All geographic coordinates in this report are based on ETRS89 / UTM Zone 29N ITRF2014 2023.75. Refer to Table 1.4 for details.

The Guidelines on Use of Report in Appendix A outline the limitations of this report.

1.3 Environmental Survey

The environmental survey was conducted to establish whether any sensitive habitats are present in the area, specifically habitats listed under Annex I of the EU Habitats Directive, habitats listed by the Oslo and Paris Commission (OSPAR) as threatened and/or declining habitats (OSPAR, 2008) and habitats and species that qualify as priority marine features (PMF). This comprised a benthic sampling programme to collect drop-down video (DDV) footage and grab samples for the analysis of benthic fauna, particle size distribution (PSD), and sediment chemistry. In addition, environmental Deoxyribonucleic Acid (eDNA) water samples were collected to detect the presence of mobile species (e.g. marine fish) within the survey area at the time of the survey.

Only photographic and PSD data will be discussed in this report, other data will be discussed in subsequent reports (Document no.: 230633-MachairWind-V5, 230633-MachairWind-V6 and 230633-MachairWind-V7).

1.3.1 Environmental Legislation

Tables 1.2 and 1.3 summarise the relevant environmental legislation applying to the MachairWind Offshore Windfarm site investigation. Together they guide the identification of habitats and species of conservation importance in the study area.

Table 1.2: Environmental Legislation

Legislation	Key aims
Conservation of Habitats and Species (Amendment (EU Exit) Regulations 2019), referred to as the 2019 Regulations	Transposes the requirements of the European Union (EU) Habitats Directive and some elements of the Wild Birds Directive (together forming the Nature Directives) into UK law; aims at conserving biodiversity through measures for protection of habitats listed in Annex I and species listed in Annex II of the Directives through the establishment of a national site network of protected sites, referred to as Special Areas of Conservation (SACs) and Special Protection Area (SPA).

Legislation	Key aims
UK Marine Strategy	Provides a framework for community action in the field of marine environmental policy through three components: <ol style="list-style-type: none"> 1. assessment of the state of UK seas and revised objectives for good environmental status (GES) for 2018 to 2024; 2. monitoring progress against set targets and indicators; 3. measuring the achievement of GES
The Wildlife and Countryside Act 1981 (as amended)	Regulates the designation of Site of Special Scientific Interest (SSSIs), which underpins the designation of Ramsar sites
Marine and Coastal and Access Act 2009	Enables the designation of Marine Conservation Zones (MCZs) in England, Wales and UK offshore waters
Marine (Scotland) Act 2010	Provides a framework which will help balance competing demands on Scotland's seas. The Act introduces a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables
Oslo and Paris (OSPAR) Convention	Establishes Marine Protected Areas (MPAs)
Convention on Biological Diversity (CBD)	Conservation of biological diversity and sustainable use of its components
Ramsar Convention	Aims at the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development

Table 1.3: Marine Protected Areas Biodiversity Features

Biodiversity Feature	Description
Priority Marine Features (PMFs)	In Scotland, habitats and species of conservation interest, termed Priority Marine Features (PMFs), are protected through the designation of Nature Conservation Marine Protected Areas (NCMPAs) under the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010. These features incorporate habitats and species included on the OSPAR List of threatened and/or declining species and habitats, and Priority Species and Habitats recognised under the UK Post-2010 Biodiversity Framework. Many PMFs are characteristic of the Scottish marine environment
Broad-scale habitats (BSH)	Represent the main types of seafloors and associated biota in UK; their conservation ensures preservation of the full range of marine biodiversity
UK Post-2010 Biodiversity Framework priority habitats and/or species	List of important (priority) habitats and species, produced by the UK Biodiversity Action Plan (BAP), superseded by the UK Post-2010 Biodiversity Framework, under the CBD
OSPAR list of threatened and/or declining species and habitats	Allows setting priorities for further conservation and protection of marine biodiversity

1.3.2 Survey Strategy

Sixty-two environmental sampling stations were predetermined by the client. These stations were arranged to provide spatial coverage throughout the survey area and were aligned with the geophysical survey lines. At each environmental sampling station, video and stills were to be acquired prior to grab sampling. The number of samples collected per parameter is listed below:

- 43 macrofaunal (FA) samples;
- 32 particle size distribution (PSD) samples;
- 30 physico-chemical (PC) samples;
- 30 eDNA water (near surface and near seabed) samples.

After geophysical data had been acquired, the SSS and bathymetric data were reviewed by the onboard environmental scientist, in conjunction with the onboard geophysicist, to confirm client predefined locations were suitable for grab sampling and camera investigations. Particular emphasis was placed on locating areas of potential conservation value (e.g. Annex I listed habitats), on boundaries between areas of differing sonic reflectivity, bathymetric highs and lows and areas characteristic of the general background conditions of the survey area.

Appendix B.1.1 provides the coordinates, data to be acquired and rationale for each location, including relocated coordinates based on SSS interpretation. Figure 1.1 provides a spatial display of these proposed survey locations overlain on the SSS mosaic.

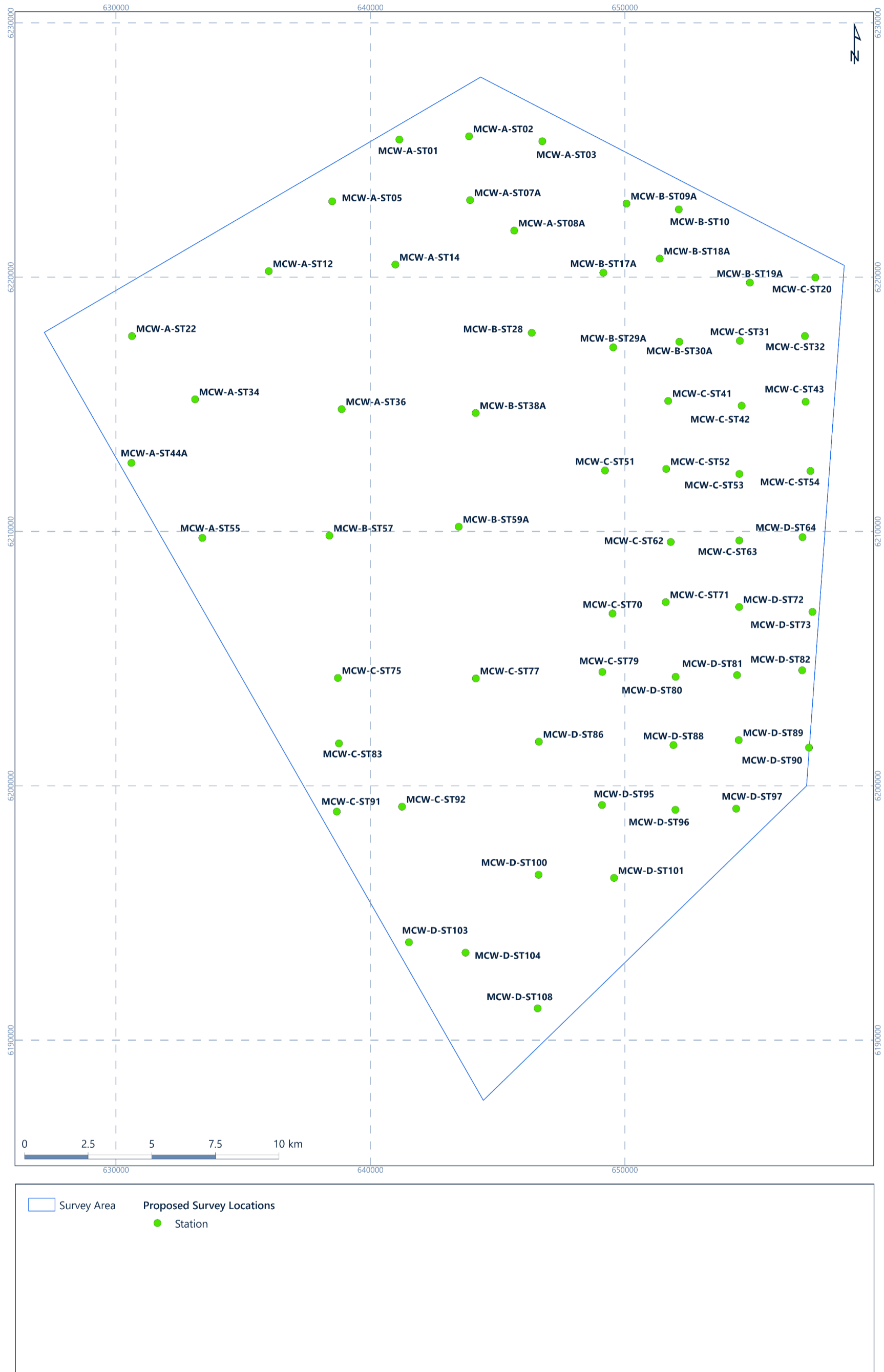


Figure 1.1: Proposed survey locations MachairWind Phase 1 Geophysical and Environmental Survey

1.4 Changes to Scope of Work

The current version of the project execution plan (PEP) is MCW-GEN-PMG-PLN-FUG-000002 PEP revision 5, dated 23/01/2024. The current version of the Client Scope of Work is "MCW-DWF-GEO-SOW-IBR-000001- MachairWind 2023 Survey Scope of Work_signed", and is dated 26/04/2023.

The original line plans for Blocks B and D were split into three priorities, priority 1, priority 2 and remaining, with the intention to complete all high priority lines before moving to those of low priority. The weather conditions changed to be favourable and allowed for all lines in Block B to be acquired, however Block D had 12 lines designated as low priority and samples at 3 environmental locations that were not acquired due to weather and time constraints. These lines were MCWD050, 054, 061, 063, 064, 066, 067, 068 and MCWDX001, X011, X012 and the environmental sampling locations were MCW-D-ST90A, MCW-D-ST96A and MCW-D-ST97A.

The prioritisation of acquisition of geophysical lines and environmental stations was dynamic throughout the project due to weather windows and other onsite conditions such as the presence of fishing gear and marine wildlife. The final environmental station was surveyed on the 24/10/2023 which allowed the focus to shift to purely geophysical data collection for the remaining days of the project.

Side scan sonar data was acquired with an EdgeTech 4205 dual-Frequency (230/540 kHz) and not the EdgeTech 4205 TriFrequency (230/540/850 kHz) SSS for Blocks A and C as outlined in the SOW. This was due to the TriFrequency SSS not being onboard at the start of the project. The SSS model was then swapped out for the EdgeTech 4205 TriFrequency for Blocks B and D after it was picked up during a port call. The high and low frequencies were kept the same at 230/540 kHz.

A rock outcrop with associated shoals was present in the northern section of the site - Dubh Artach skerry. An exclusion zone was made around this for vessel safety reasons which resulted in a data gap in this area – Figure 3.1. Lines MCWA016, 017, 018, 019 & 020 were split in two (designated MCWA####A) due to the presence of the Dubh Artach skerry.

Several lines across blocks A, B and D were changed from the original line plan during the survey. These lines are detailed below with the corresponding reasons for the changes.

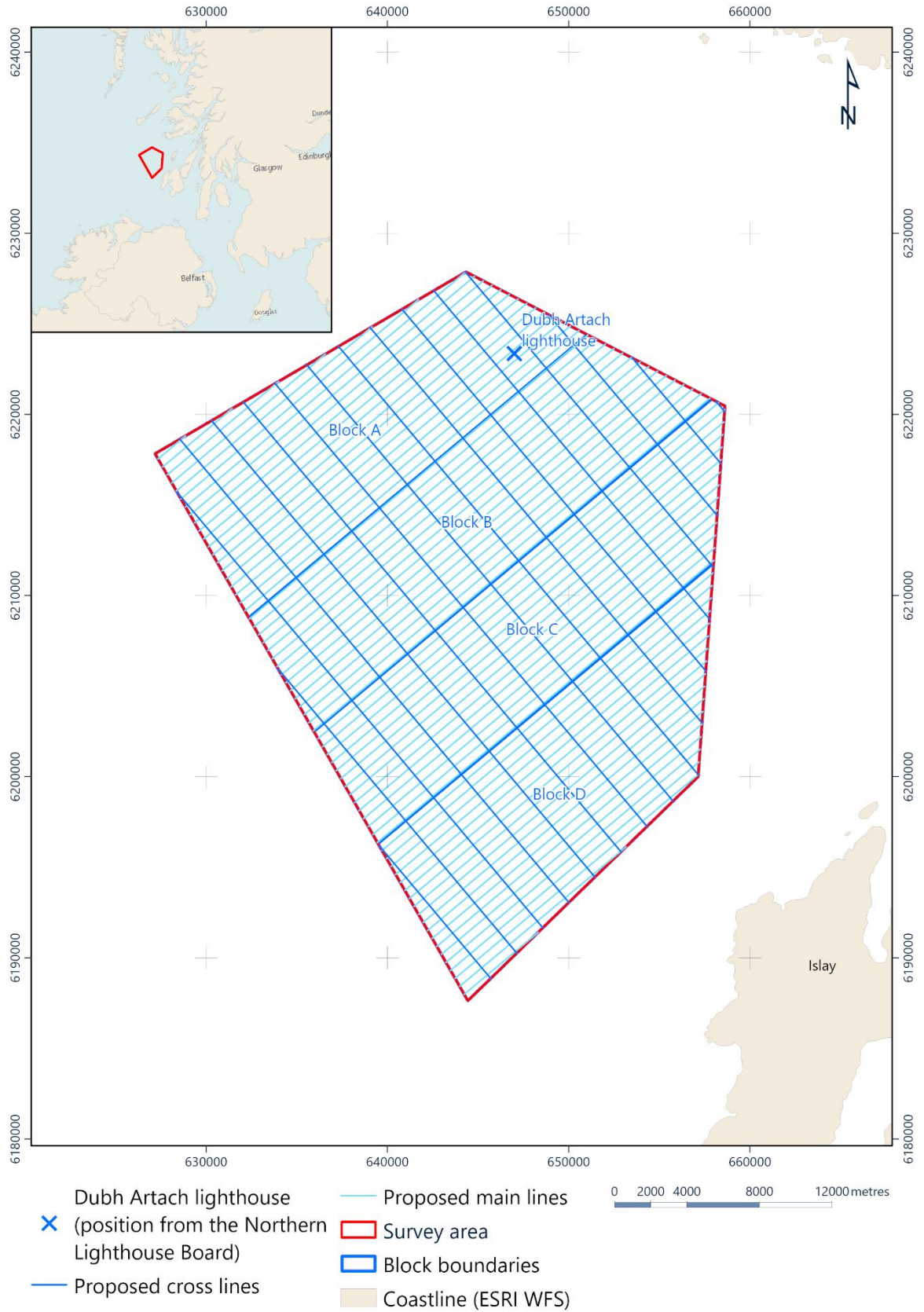
- Line MCWA014 had a deviation online due to the presence of a met ocean buoy.
- The fishing exclusion zone limits set by Fugro at 1 km around the survey area mandated short line turns, as a result, lines MCWA007 and MCWA001 do not have full SSS and magnetometer coverage.
- Lines MCWB021 and MCWBX013 were cut short due to outcrop avoidance around the Dubh Artach lighthouse for vessel safety reasons.
- Lines MCWDX006 and MCWDX008 were cut short due to a 10km distance to shoreline.

1.5 Coordinate Reference System

All geographic coordinates in this report are based on ETRS89 / UTM Zone 29N ITRF2014 2023.75. Refer to Table 1.4 for details.

Table 1.4: Project geodetic and projection parameters

Global Positioning System Geodetic Parameters *					
Datum:	International Terrestrial Reference Frame 2014				
Ellipsoid:	GRS 1980				
Semi-major axis:	A = 6 378 137.000 m				
Inverse flattening:	1/f = 298.257222101				
Local Datum Geodetic Parameters †					
Datum:	European Terrestrial Reference System 1989				
Ellipsoid:	GRS 1980				
Semi-major axis:	A = 6 378 137.000 m				
Inverse flattening:	1/f = 298.257222101				
Datum Transformation Parameters from WGS84 to ETRS89 – Coordinate Frame Rotation Convention ‡					
Shift dX:	+0.05608	m	Rotation rX:	0.0028148 arc sec	Scale Factor: 0.0036325 ppm
Shift dY:	+0.05358	m	Rotation rY:	0.0170275 arc sec	
Shift dZ:	-0.10023	m	Rotation rZ:	0.027522 arc sec	
Project Projection Parameters					
Map Projection:	Transverse Mercator (TM)				
Grid System:	UTM Zone 29 N				
Central Meridian:	009° 00' 00" West				
Latitude of Origin:	00° 00' 00" North				
False Easting:	500 000 m				
False Northing:	0 m				
Scale factor on Central Meridian:	0.9996				
Units:	Metre				
Notes					
* = Fugro Starfix navigation software uses WGS84 geodetic parameters as a primary datum for any geodetic calculations					
† = Source: SPR					
‡ = This is the right-hand coordinate frame rotation used by the Fugro Starfix navigation software					



All line prefixed MCW. All lines were acquired with single beam echosounder, MBES, SSS, hull-mounted sub bottom profiler, magnetometer and 2D ultra high-resolution seismic data.

Figure 1.2: MachairWind integrated geophysical survey programme

2. Methods and Resolution Limitations

2.1 Seafloor Conditions

2.1.1 Bathymetry

Bathymetric data were acquired using EM2040 multibeam echosounders (MBES). Water depths are quoted relative to Lowest Astronomical Tide (LAT) and are accurate to better than ± 0.25 m (95%) and the positional accuracy is better than ± 0.5 m (95%). The bathymetry data were reduced using observed Global Navigation Satellite System (GNSS) tides and corrected to LAT using the Vertical Offshore Reference Frame (VORF, Rev.2) in the UK sector.

Single beam (SBES) and multi beam (MBES) echosounder data were acquired along all lines. SBES data were recorded for each line and used for quality control only. Bathymetric features of smaller lateral extent than the line spacing may not have been detected by the SBES data; however, the MBES dataset provides coverage between single beam lines.

The MBES data were processed to a 1 m by 1 m grid cell size. For bathymetric contours, the data were smoothed with a 30 m radius. Localised gradients or features of smaller lateral extent may be underestimated.

MBES gridded data were used to complement interpretation of the seafloor sediments and morphology and to help in determining the position of the seafloor contacts during the SSS data interpretation in SonarWiz. For sediment and morphology classification the MBES gridded data were used in ArcGIS to identify bedforms and seafloor features within the MachairWind survey area.

Seafloor gradients were calculated from the 1.0 m bathymetry digital terrain model (DTM). For each cell, the maximum change in elevation over the distance between the cell and its eight surrounding neighbours (2 x 2 cells) was used to calculate the gradient, this represents the steepest gradient which was then assigned to the centre cell.

Throughout the report the following terminology is used to describe seafloor gradients:

- Very gentle $<1^\circ$
- Gentle 1° to $<5^\circ$
- Moderate 5° to $<10^\circ$
- Steep 10° to $<20^\circ$
- Very steep $\geq 20^\circ$

2.1.2 Seafloor Sediment classification

Seafloor sediment interpretation was based on MBES and SSS data as well as environmental grab samples. Environmental photographs were also used to aid interpretation. The seafloor sediment descriptions are based on BS EN ISO 14688-1, BS EN ISO 14688-2 and BS5930.

Variations in the intensity of SSS data were correlated with the environmental grab sample data (using the classifications shown in Table 2.1 and Table 2.2) to delineate the different sediment types.

Table 2.1: Sediment particle size and classification terms

Range of particle sizes [mm]	Particle size fraction	Soil group
> 200	Boulder	Very coarse soil
63 to 200	Cobble	
>2 to ≤ 63	Gravel	Coarse soil
>0.063 to ≤ 2	Sand	
>0.63 to ≤ 2	Coarse sand	
>0.2 to ≤ 0.63	Medium sand	
>0.063 to ≤ 0.2	Fine sand	
>0.002 to ≤ 0.063	Silt	Fine soil
≤ 0.002	Clay	

Table 2.2: Secondary soil fractions

Term	Principal soil type	Approximate proportion of secondary constituent
Slightly silty	Sand	< 5%
Silty		5% to 20%
Very silty		>20%
Sandy	Silt	35% to 65%

2.1.3 Seafloor Morphology and Features

Seafloor morphology and features interpretation were based on bathymetry, backscatter, side scan sonar and magnetometer data. The SSS data were acquired in dual frequency; low frequency at 230 kHz and high frequency at 540 kHz. Analysis was carried out using acoustic characteristics such as reflectivity, pattern, and backscatter strength. Environmental data were also used to aid interpretation of specific features within the survey area.

The horizontal resolution for high frequency SSS data, dependant on the range and speed of the fish, is approximately 0.1 m across track and 0.4 m (at 100 m from the nadir) along track for both Edgetech 4205 Dual / 4205 Tri Frequency datasets; obstructions smaller than this may not have been detected. Heights of seafloor obstructions estimated from the SSS data are considered to have an accuracy of $\pm 20\%$.

The positional accuracy of features interpreted from the SSS data depends on a combination of the vessel positioning, acoustic positioning of the towfish relative to the vessel and interpretation of position relative to the towfish. For this dataset, the overall positional accuracy is estimated as ± 2 m. Where seafloor features show a bathymetric expression, the positions were refined using a combination of SSS and echosounder datasets.

The SSS data were checked line by line for sonar contacts and other features in a waterfall display, to allow the visualisation of the seafloor data at the highest resolution. Contact picking was started offshore and was continued after acquisition concluded, in the office.

Boulders were picked according to the following strategy: where there were approximately 40 or more boulders present within a 100 m x 100 m area, 5 boulders were picked per 100 m x 100 m, and designated as "areas of numerous boulders", delineated with a polygon. Grids comprising 100 m x 100 m cells, were generated to aid this interpretation. All subsequent boulders not within the boulder areas, and all non-boulder contacts that measured 0.3 m or greater, in any dimension were interpreted.

Mosaics were created from both low frequency (LF) and high frequency (HF) SSS data and exported in GeoTiff format, both at a cell size of 0.5 m. SSS contacts were rationalised to a single position and then checked against MBES gridded data. If a feature was observed to have recognisable relief on the bathymetry DTM, its position was adjusted to the more accurately georeferenced DTM.

All SSS interpretation took place in SonarWiz using the HF SSS data and the results were integrated in ArcGIS. Following this, each contact was assigned a confidence level based on the following criteria:

- Low Target observed on one SSS line only;
- Med Target observed on multiple SSS lines, but not on any other sensor;
- High Target observed on multiple SSS lines and confirmed by another source;
- Very High Target has been moved to the MBES position.

Confidence, and intern the use of greater confidence levels, is severely limited by the extent of the gaps between acquired lines. In the majority of cases only a single pass of SSS data is available with incomplete overlap from the corresponding bathymetry line due to the differences in swath width. Medium confidence (Med) is possible only at the intersections between mainlines and crosslines or where overlapping data is present from reruns or infills. Likewise, high confidence as above is similarly limited. However, where a contact has been observed on a single SSS line and confirmed by other sources, namely through being observed on MBES data, it has been designated as high confidence. It should be noted that these classifications are more limited within the context of this site.

Finally, SSS contacts were correlated against magnetic anomalies and verified against existing database information. Utilising this information, contacts could further be assigned as items of debris. The LF and HF SSS mosaics, MBES and backscatter data were used to aid the seafloor sediment interpretation.

Bedforms have been interpreted from MBES, backscatter and SSS datasets. Throughout the report the following classification is used to describe seafloor bedforms (Table 2.3):

Table 2.3: Classification Scheme for seafloor flow-transverse bedforms

Bedform	Morphological interpretation		Dimensions	
			Wavelength	Height
Mobile sediments	Small scale ripples		Wavelength < 0.6 m	
	Large scale flow-transverse bedforms	Ripples	0.6 m – 5 m	0.075 m - 0.4 m
		Mega ripples	5 m – 10 m	0.4 m - 0.75 m
		Sand waves	10 m – 100 m	0.75 m – 5 m
		Sand dunes	> 100 m	> 5 m
Bedforms superposition				
Simple		without smaller scale bedforms superimposed		
Compound		e.g., mega ripples sand waves, rippled sand waves		
Crest morphology of bedforms in plan view				
Straight crested		Crests from linear to sinuous or liguloid crests		
Multidirectional crests		Disrupted crest with various orientations similar to hummocky seafloor		
Symmetry of bedforms in profile view				
Asymmetrical profile		Stoss and lee side slopes of 30 ⁰ -35 ⁰ degrees. Strong unidirectional currents or in asymmetrical reversing currents possible		
Symmetrical profile		Stoss and lee sides symmetrical with gently dipping slopes (up to 20 ⁰), symmetrical reversing current		
Note Bedforms classification modified from Ashley, G.M. (1990)				

It is important to note that the boundaries of interpreted seafloor features, such as the bedforms described above, and indeed all seafloor features, have been digitised with varying confidence and are heavily influenced by data quality, orientation of acquisition, data density and the resulting limited extent to which overlapping data is available.

Furthermore, it should be noted that due to the large data gaps between lines, a large proportion of the site cannot be investigated. As such, interpretation of the available data must be considered as an indicative sample of features, in keeping with the reconnaissance nature of the survey.

2.2 Magnetic Anomalies

Magnetic anomalies interpretation was based on acquired magnetometer data and processed and interpreted using Geosoft Oasis Montaj software.

2.2.1 Data Processing

The sampling rate of the magnetometers was 10 Hz, approximately equivalent to a measurement every 0.2 m along each survey line. Smoothed navigation data were added to the magnetometer data using Fugro’s processing scripts within Starfix MProc. Processing and interpretation were then carried out using the Geosoft Oasis Montaj software. A schematic overview of the magnetometer processing flow is shown in Figure 2.1.

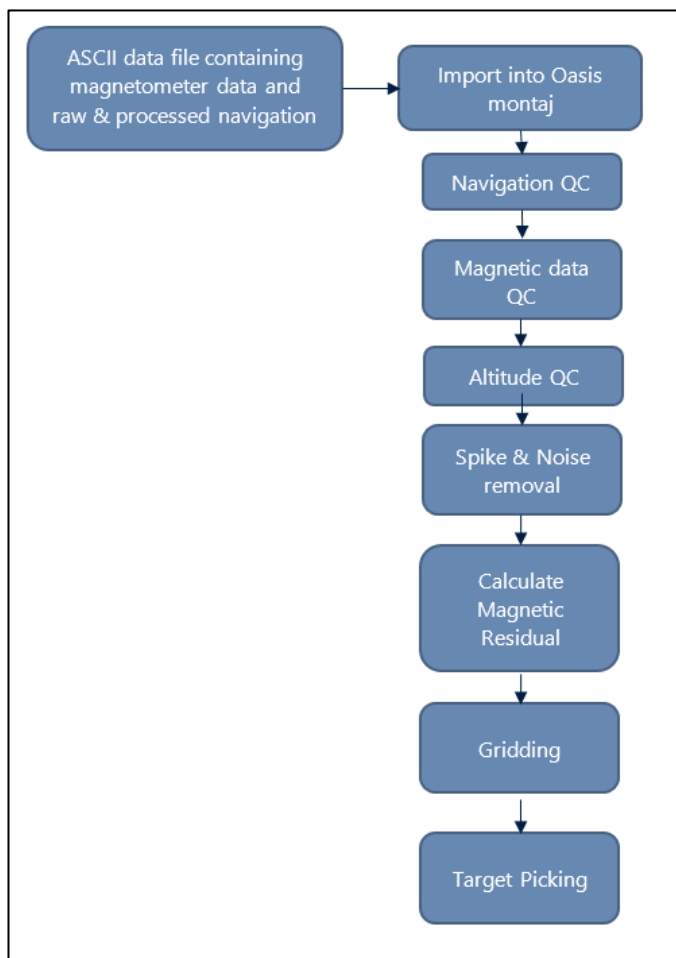


Figure 2.1: Schematic overview of the magnetometer processing flow

2.2.1.1 Navigational data

In Fugro Starfix VBA Proc processing software, navigational data were merged with the raw magnetometer data, then exported as a single ASCII data file per line. Ultra-short baseline (USBL) beacon positions were then de-spiked and interpolated. The position of the magnetometer was calculated by applying offsets from the USBL beacon to the magnetometer sensor. Where any USBL gaps exceeded 10 seconds, the magnetometer data were discarded. Refer to Table 2.4 for the interpolation parameters.

Table 2.4: Navigation processing parameters within VBA Proc

Input Channel	Output Channel	Operation	Parameters
Easting Northing	CorrEasting CorrNorthing	De-spike/interpolate	5 Fiducials

2.2.1.2 Altitude data

The required altitude threshold was 10 m. All the magnetic data with an altitude greater than 10 m were masked out from the calculation of the residual grid.

2.2.1.3 Spike & Noise Removal

All the data were free from noise greater than 1 nT and therefore within the specified noise levels. Noise levels in the magnetic data were constantly monitored to achieve the required specifications. All data with a signal strength lower than 100 were masked out.

Spikes in the magnetometer data were manually removed. Note that in these instances, magnetometer data were not interpolated, but replaced by a dummy which was not displayed in the profile or plan views. High frequency and low amplitude noise were removed from the de-spiked magnetometer data by applying a B-spline filter. Refer to Table 2.5 for details.

Table 2.5: Magnetometer channel de-spiking and noise removal

Input Channel	Output Channel	Operation	Parameters
MAGNETIC_FIELD	MAG_EDIT	Copy channel	Decimation Factor 1
MAG_EDIT	MAG_EDIT	Manually de-spike	As required
MAG_EDIT	MAG_Bspl	B-Spline filter	Smoothness: 0.6 Tension: 0

2.2.1.4 Residual Magnetic Field

Long wavelength variations in the magnetic field were removed in order to isolate the shorter wavelengths which make up the residual magnetic field. After de-spiking and noise removal, as described above, a sequence of non-linear filters was applied to the magnetometer data, as shown in Table 2.6.

Table 2.6: Filter sequence to obtain the residual magnetic field

Input Channel	Output Channel	Operation	Parameters	Comments
MAG_Bspl	MAG_NL1	Non-linear filter	Width: 40 Tolerance: 2.0	Fits curve to long wavelength anomalies
MAG_NL1	MAG_NL2	Non-linear filter	Width: 20 Tolerance: 1.0	
MAG_NL2	MAG_NL3	Non-linear filter	Width: 10 Tolerance: 0.5	
MAG_NL3	MAG_NL4	Non-linear filter	Width: 5 Tolerance: 0.25	
MAG_NL4	MAG_NL5	Non-linear filter	Width: 2 Tolerance: 0.125	
MAG_NL5	MAG_NL5_Bspl	B-Spline filter	Smoothness: 0.6 Tension: 0	Removes smaller spikes

2.2.1.5 Gridding

Grids of the residual magnetic field and analytic signal were created in Oasis Montaj. The residual magnetic field grid was created from the Mag_Res channel.

The analytic Signal grid is calculated based on the residual magnetic field grid by:

$$\text{Analytic Signal} = \sqrt{\left(\frac{\partial R}{\partial x}\right)^2 + \left(\frac{\partial R}{\partial y}\right)^2 + \left(\frac{\partial R}{\partial z}\right)^2}$$

Where R is the residual magnetic field.

The residual magnetic field and analytic signal were each gridded using the minimum curvature algorithm, with a 5 m cell size and 40 m blanking distance.

2.2.2 Data Interpretation

Magnetic anomalies (targets) were identified from the profiles of the residual magnetic field along each survey line. A minimum threshold of 5 nT for the peak-to-peak amplitude (dipoles and monopoles) was used when identifying any magnetic anomalies. The magnetic field data was additionally processed to amplify wide wavelength anomalies to observe geological trends across the survey area. All anomalies were checked against contacts identified from the SSS and MBES data for any correlation.

The magnetic anomalies are listed in Appendix C1.2 of the Geophysical Results Report.

2.3 Environmental Survey Method

2.3.1 Seafloor Photography

Seafloor video and photography were acquired using a Subsea Technology and Rentals Limited SeaSpyder deep sea camera system, mounted within a purpose built camera frame, complete with a high definition video camera and high resolution stills camera (24 megapixel). A separate high power strobe and four high intensity LED lamps provided illumination and quad scaling lasers were set up 17 cm wide by 16.5 cm high to provide a scale. The camera system was equipped with an USBL beacon for subsea positioning. Manual position fixes were recorded for every photograph captured and positional data were overlain on the recorded video, along with date, time, project and station information.

Details of the operational procedure can be found in the field report (Document no.: F210836-REP-001; Fugro, 2024).

2.3.2 Sediment Sampling

Seafloor samples were acquired using a 0.1 m² dual van Veen (DVV) grab, equipped with a USBL beacon. Manual position fixes were recorded when the grab reached the seabed. Where DVV sampling failed due to the presence of particularly coarse sediments, a 0.1 m² Hamon grab was utilised.

Details of the operational procedure can be found in the field report (Document no.: F210836-REP-001; Fugro, 2024).

2.4 Environmental Interpretation Method

2.4.1 Seafloor Habitats and Biotopes Classification

To assess the habitats present within the survey area, detailed analysis of the photographic data was undertaken, noting the locations of any observed changes in sediment type and/or associated faunal community. Taxa were recorded to the lowest possible taxonomic level. It should be noted that many species cannot be identified from photographic data alone and as such, higher taxonomic levels were used. The full photographic data analysis method is presented in Appendix D.1.

Habitats within the survey area have been classified in accordance with 'The Marine Habitat Classification for Britain and Ireland – Version 22.04' (JNCC, 2022) which has compiled habitat information from a wide range of marine scientists and conservation bodies into a single database. Table 2.7 summarises the Joint Nature Conservation Committee (JNCC) hierarchy, with an example of the coding system. These classification systems are designed to incorporate small scale temporal variations (e.g. seasonal) into the biotope/habitat categories. However, biological communities and marine environments can be highly

dynamic and temporally variable, therefore the biotopes and habitats identified by the current assessment are representative of the survey area at the time of sampling only.

Table 2.7: JNCC (2022) biotope classification hierarchy example

Level	Example Classification Name	Example Classification Code
1. Environment	Marine habitats	-
2. Broad habitat types	Sublittoral sediments	SS
3. Main habitats	Sublittoral sands and muddy sands	SS.SSa
4. Biotope complexes	Circolittoral fine sand	SS.SSa.CFiSa
5 & 6. Biotopes and sub-biotopes	<i>Echinocyamus pusillus</i> , <i>Ophelia borealis</i> and <i>Abra prismatica</i> in circolittoral fine sand	SS.SSa.CFiSa.EpusOborApri

Classifications were assigned to each habitat type observed within the video and stills photography. Additional information from grab sampling, such as sediment particle size and macrofaunal communities, was used where applicable. Although, theoretically, a biotope can be assigned to any sized area of seafloor, for the purposes of this assessment the commonly accepted minimum habitat size of 25 m² was adopted. For distinct areas of mixed habitats/biotopes (e.g. rock interspersed with coarse sediment) where the overall area was at least 25 m², biotope mosaics were considered (Parry, 2019).

2.4.2 Sensitive Habitats and Species

Habitats within the survey area have been classified in accordance with the Joint Nature Conservation Committee (JNCC) habitat classification (JNCC, 2018). The JNCC classification system is designed to incorporate small-scale temporal variations (e.g. seasonal) into the biotope/habitat categories. However, biological communities and marine environments can be highly dynamic and temporally variable. Therefore, the biotopes and habitats identified by the current assessment are representative of the survey area at the time of sampling only.

Photographic data were reviewed to assess the seafloor and associated faunal communities with regards to the definition of:

- Annex I Stony Reef Assessment, following the assessment criteria in Golding et al. (2020), presented in Appendix D.3.1.

Macrofaunal data (Benthic Survey Interpretive Report, Volume 5) was also reviewed for the presence of sensitive species recorded within the survey area.

Habitats and species were assessed for their conservation status using the Annex I habitats list (JNCC, 2019a), Annex II species list (JNCC, 2019b), OSPAR threatened and/or declining species and habitats (OSPAR, 2023), UK BAP list of priority species (JNCC, 2019c) and habitats (JNCC, 2019d), Scottish biodiversity list species and habitats (NatureScot, 2020) and PMFs (JNCC, 2014). Reference to the International Union for Conservation of Nature (IUCN) Red List (IUCN, 2022) status of the sensitive taxa identified is also included, where appropriate.

3. Results

3.1 General

The interpretation was based upon all available data and incorporates the results from the environmental grab samples and photographs (Appendix C and Volume 3 of this report respectively), and regional geological information. The interpretation is illustrated with charts presented in the geophysical results report (Report no.: 230633-MachairWind-V4) and data examples (Figure 3.1 to Figure 3.8).

3.2 Seafloor Conditions

3.2.1 Bathymetry

An overview of the bathymetry across the MachairWind survey area is shown in Figure 3.1. Charting will be discussed in the geophysical results report (Report no.: 230633-MachairWind-V4).

All water depths are referenced to mean Lowest Astronomical Tide (LAT) using observed Mean Sea Surface (MSS) tides logged online and corrected to LAT using the Vertical Offshore Reference Frame (VORF, Rev.2) in the UK sector.

Table 3.1 presents a summary of the bathymetry across the MachairWind survey area.

Table 3.1: Summary of bathymetry across the MachairWind survey area

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W		
Minimum water depth	21.5 m LAT	associated with bedrock outcrops around the Dubh Artach lighthouse (647 458 E, 6 221 059 N)
Maximum water depth	119 m LAT	Associated with large area of scour immediately east of the bedrock outcrop around the lighthouse (649 385 E, 6 222 230 N)
Average (natural) gradient	<1°	
Maximum gradient	83°	Associated with bedrock outcrops (649 012 E, 6 214 216 N)
Notes LAT = Lowest Astronomical Tide		

The average gradient within the survey area is very gentle (<1°). The morphology of the MachairWind OWF site is highly variable. In the north-west part of the site, the seafloor deepens gently, the slope following a north-west direction. The north of the site is dominated by bathymetric high of the outcrops upon which the Dubh Artach lighthouse is situated. The shallowest recorded seafloor depth, at 21.5 m LAT, is recorded here. Immediately to the north and east of the outcrops are large areas of scour where the maximum depth for the area is measured at 119 m LAT. Smaller outcrops are distributed across the north and east of the area, at one of which the maximum recorded gradient of 83° is recorded. The area west of the lighthouse, to the centre and west is dominated by large sand dunes. The eastern limit of

the dunes appears to be bounded by a large, elongated depression orientated south-south-west to north-north-east across the centre of the survey area, shallowing to the north and south. To the south of the dunes is a bathymetric high thought to comprise an area of Glacial 'Till' outcrop and reworked sediment. A field of sand wave and dunes, smaller than those in the north, are observed around the periphery of this bathymetric high, the flanks of the large depression and across the south and south-east of the survey area around the periphery of further bathymetric highs to the south and east. These bathymetric highs, thought to comprise the same Glacial 'Till' outcrops and reworked sediment as well as further bedrock outcrops, are present across the south to south-east of the survey area. The east of the survey area, east of the large central depression, is gently sloping, shallowing to the east/north-east, to flat, with some bedrock outcrops.

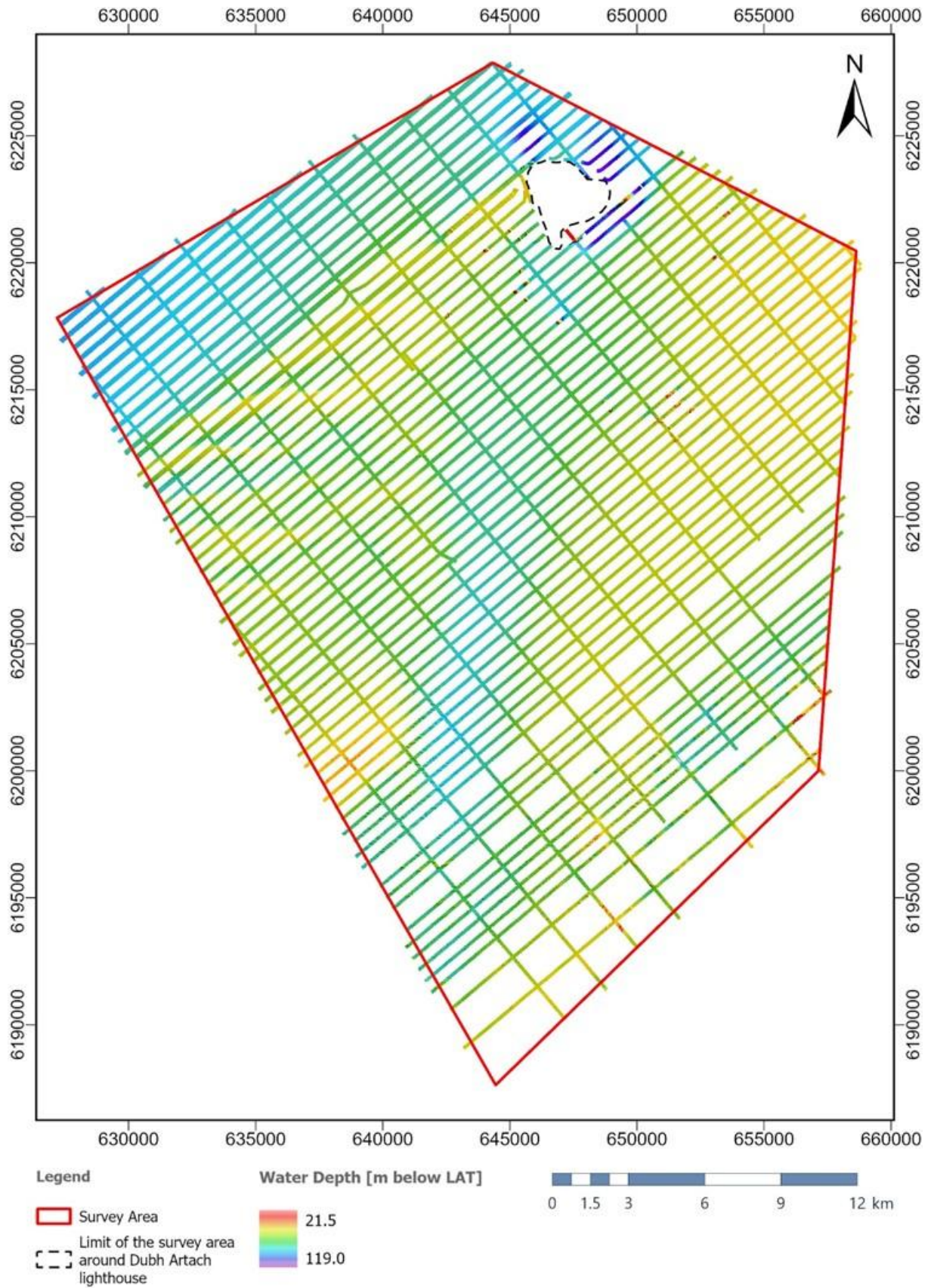


Figure 3.1: Overview of the bathymetry within the MachairWind OWF survey area

3.2.2 Seafloor Sediment Classification

The seafloor sediment charting is presented in the geophysical results report (Report no.: 230633-MachairWind-V4).

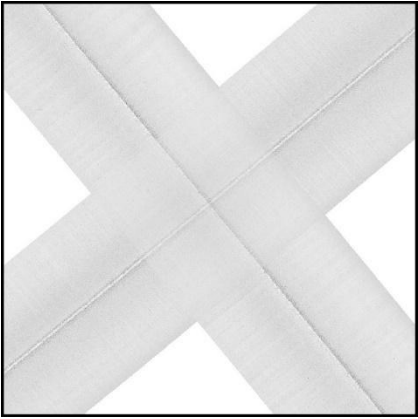
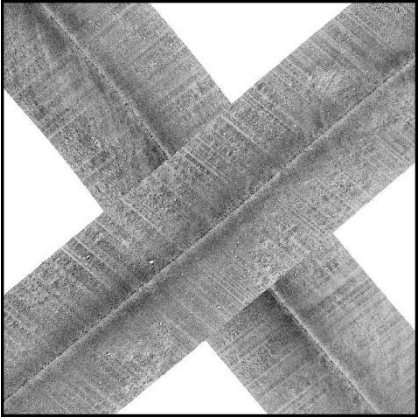
The seafloor sediments are classified as:

- Sand with shell fragments
- Coarse- to gravely-sand, gravels, cobbles and boulders

Across the survey area, the seafloor sediments predominantly comprise sand with shell fragments. Coarse- to gravely-sand, gravels, cobbles and boulders are found either enclosed within depressions across the area, or on bathymetric highs in the north, south-west and south of the area, where boulders are particularly prevalent.

The acoustic characteristics of the different sediment types are presented in Table 3.2.

Table 3.2: Seafloor sediment classification within the MachairWind OWF survey area

SSS Image	Acoustic Description	Sediment Classification
	Low to moderate reflectivity	Sand with shell fragments
	Moderate to high reflectivity	Coarse to gravely sand, gravels, cobbles and boulders

3.2.3 Seafloor Morphology and Features

Seafloor morphology and features interpretation within the MachairWind OWF survey area is presented in the geophysical results report (Report no.: 230633-MachairWind-V4) and data examples (Figure 3.2 to Figure 3.7).

The seafloor morphology and features observed within the survey area are gathered into four main groups:

- Depositional features;
- Outcrops;
- Man-made features;
- Seafloor contacts.

3.2.3.1 Depositional Features

The following depositional features are observed within the survey area:

- Ripples (flow-transverse bedforms);
- Mega ripples (flow-transverse bedforms);
- Sand waves (flow-transverse bedforms);
- Sand dunes (flow-transverse bedforms).

The classification is used to describe seafloor bedforms can be found in table Confidence, and intern the use of greater confidence levels, is severely limited by the extent of the gaps between acquired lines. In the majority of cases only a single pass of SSS data is available with incomplete overlap from the corresponding bathymetry line due to the differences in swath width. Medium confidence (Med) is possible only at the intersections between mainlines and crosslines or where overlapping data is present from reruns or infills. Likewise, high confidence as above is similarly limited. However, where a contact has been observed on a single SSS line and confirmed by other sources, namely through being observed on MBES data, it has been designated as high confidence. It should be noted that these classifications are more limited within the context of this site.

Finally, SSS contacts were correlated against magnetic anomalies and verified against existing database information. Utilising this information, contacts could further be assigned as items of debris. The LF and HF SSS mosaics, MBES and backscatter data were used to aid the seafloor sediment interpretation.

Bedforms have been interpreted from MBES, backscatter and SSS datasets. Throughout the report the following classification is used to describe seafloor bedforms (Table 2.3):

Table 2.3

Depositional features observed within the survey area are classified as bedforms. Bedforms are mobile sediment features generated by currents, that have laminar to turbulent flow patterns. The presence of mobile sediments can result in exposure, spanning, and/or increased burial of infrastructure. An overview of the depositional features is provided in Table 3.3 below. Further details can be found in Appendix B.4 Seafloor Features Charts of the Geophysical Results Report (230633-MachairWind-V4)

Flow-transverse bedforms are normally aligned perpendicular to peak tidal flow. The classification of large flow-transverse bedforms used in this report is modified from Ashley (1990). Based on the classification, ripples, mega ripples, sand waves and sand dunes are observed within the MachairWind OWF survey area.

Ripples are observed within depressions across the north and centre of the area, and on the bathymetric highs in the south-west and south/south-east of the area, in areas of moderate to high reflectivity sediment (Figure 3.2). Across the majority of the site the ripple crests are oriented roughly north-north-east by south-south-east, indicating an east-north-east to west-south-west axis of flow. Multiple orientations of ripple crests are observed on and with proximity to the bathymetric high in the south of the area. Here ripple crests indicate a roughly north to south orientation of flow in addition to, often overlapping or immediately adjacent to, the east-north-east/west-south-west flow observed across much of the site. The symmetry, and therefore direction of propagation/migration of the ripples cannot be ascertained and thus a single direction cannot be indicated for flow.

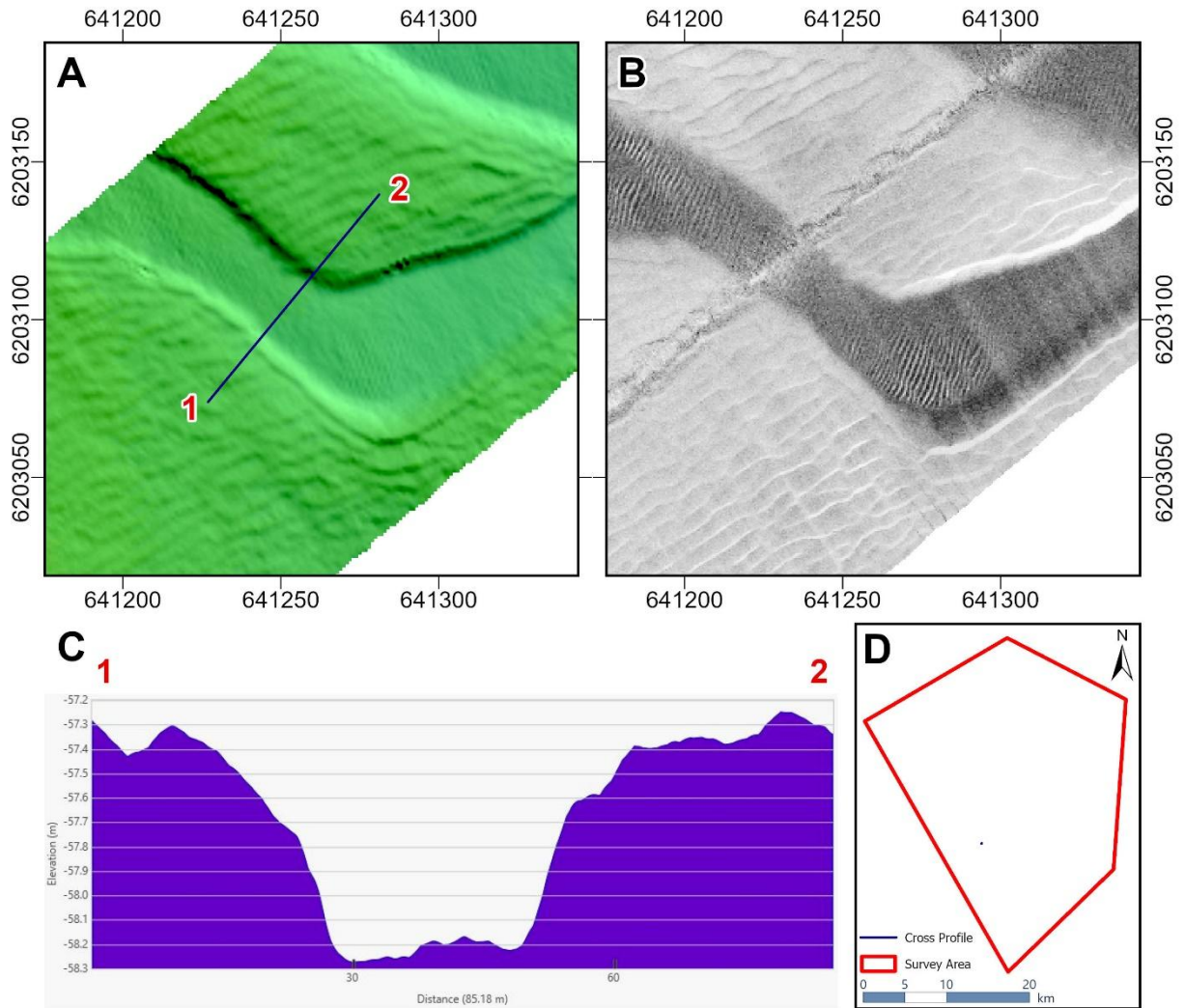


Figure 3.2: Ripples within the MachairWind OWF survey area

A – Shaded relief bathymetry. B – High Frequency side scan sonar. C – Cross profile. D – Location within the survey area

Mega ripples are observed within areas of moderate to low reflectivity sediment (Figure 3.3) across much of the north, west and south of the area, except for the bathymetric highs where they and the sediment are largely absent. In the north, where they are superimposed upon large sand dunes, and west of the area, mega ripple crests are orientated roughly north-east by south-west with asymmetry indicating a flow to the south, juxtaposed against the enclosed area of ripples. To the south of the area, on the flanks of and within the large, elongated depression, the orientation of mega ripples are observed to exhibit both north-west to south-east and roughly north-east to south-west oriented crests, with asymmetry indicating flows to the south-west and south-east respectively. In these areas, mega ripples are observed superimposed upon larger bedforms that range from sand waves to dunes. In the south-east of the area, megaripple crests are again oriented roughly north-west to south-east. However, their asymmetry varies from the south-west to the south-east of the area, indicating a change in dominant flow from south-west to north-east respectively, with roughly symmetrical geometries between the two, indicative of bidirectional flow. Additionally, with proximity to the bathymetric highs in the south/south-east of the area,

mega ripples are observed within the troughs of perpendicularly oriented linear bedforms that appear to be low-amplitude sand waves.

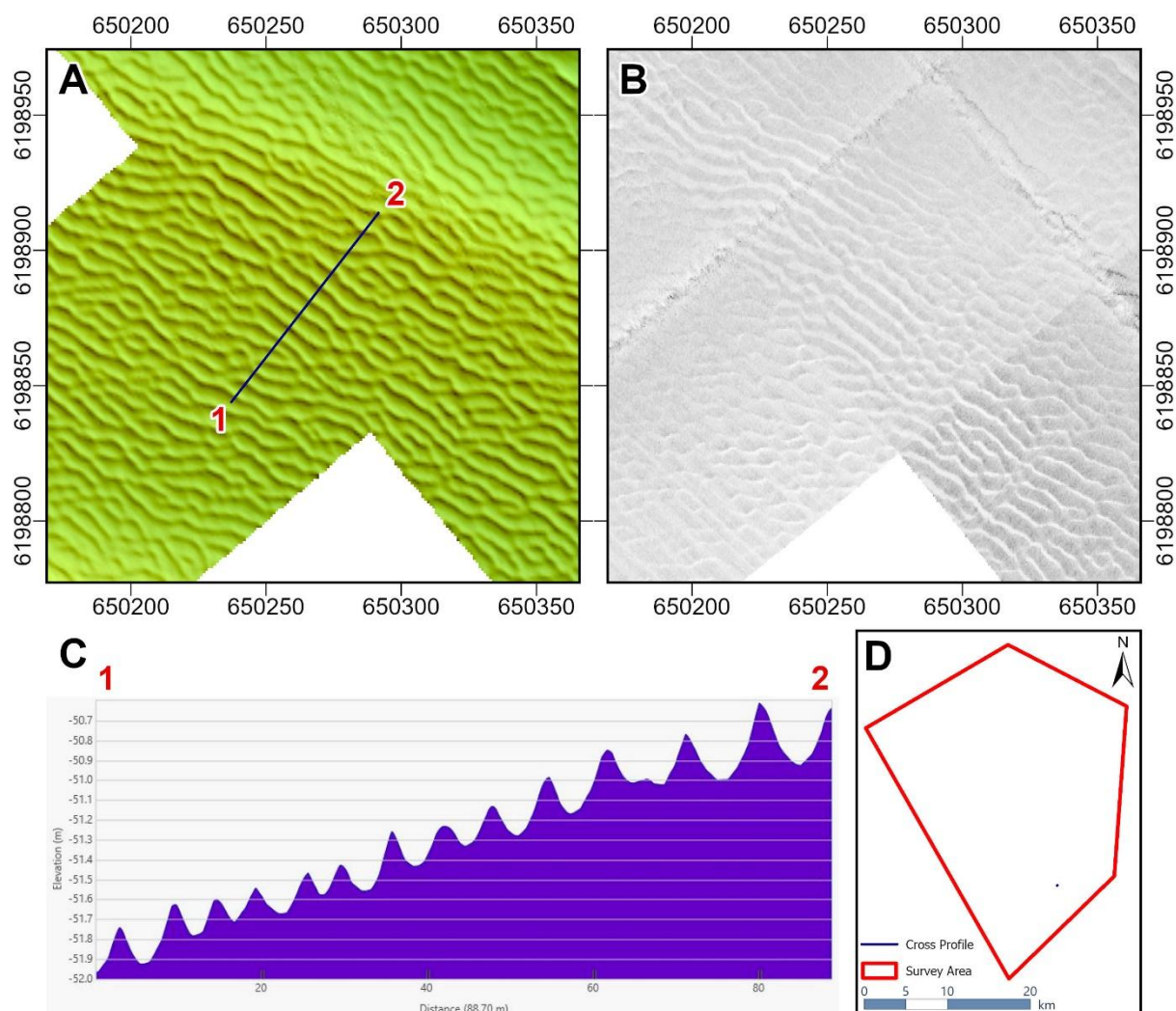


Figure 3.3: Mega ripples within the MachairWind OWF survey area

A – Shaded relief bathymetry. B – High Frequency side scan sonar. C – Cross profile. D – Location within the survey area

Linear bedforms up to 0.5 m in height with observed maximum wavelengths on the order of 30 m on the bathymetric highs in the south of the area are interpreted to be low amplitude sand waves (Figure 3.4). The crests of these sand waves are predominantly oriented north-east to south-west, with a few areas exhibiting a north to south orientation. Asymmetry varies, indicating flow directions of south-west, north-east, east, west, and possibly bidirectional where approximately symmetrical geometries are observed. These bedforms, typically exhibiting moderate to high reflectivity, are commonly observed to have mega rippled, low-reflectivity sediment within their troughs.

An area of sand waves and dunes is interpreted in the south of the area, along the periphery and between the bathymetric highs in the south-west and south on the slopes and to the south of the large central depression. The maximum observed height within this region of bedforms is approximately 6.6 m with wavelengths commonly exceeding 200m. The crests of

these bedforms vary in orientation, between and along individual crests, from east-north-east by west-south-west through to east-south-east by west-north-west with asymmetry that indicates a generally south dominant flow. The appearance and geometry of the waves/dunes varies. Approaching the bathymetric highs, the troughs between waves are commonly absent of low reflectivity sediment. This likely reflects areas of stronger currents and or poorer sediment supply in comparison to those dunes and waves away from the highs, where the low reflectivity sediment is present and where the larger examples of the waves/dunes are to be found. In all instances, mega ripples are present, superimposed upon the waves/dunes.

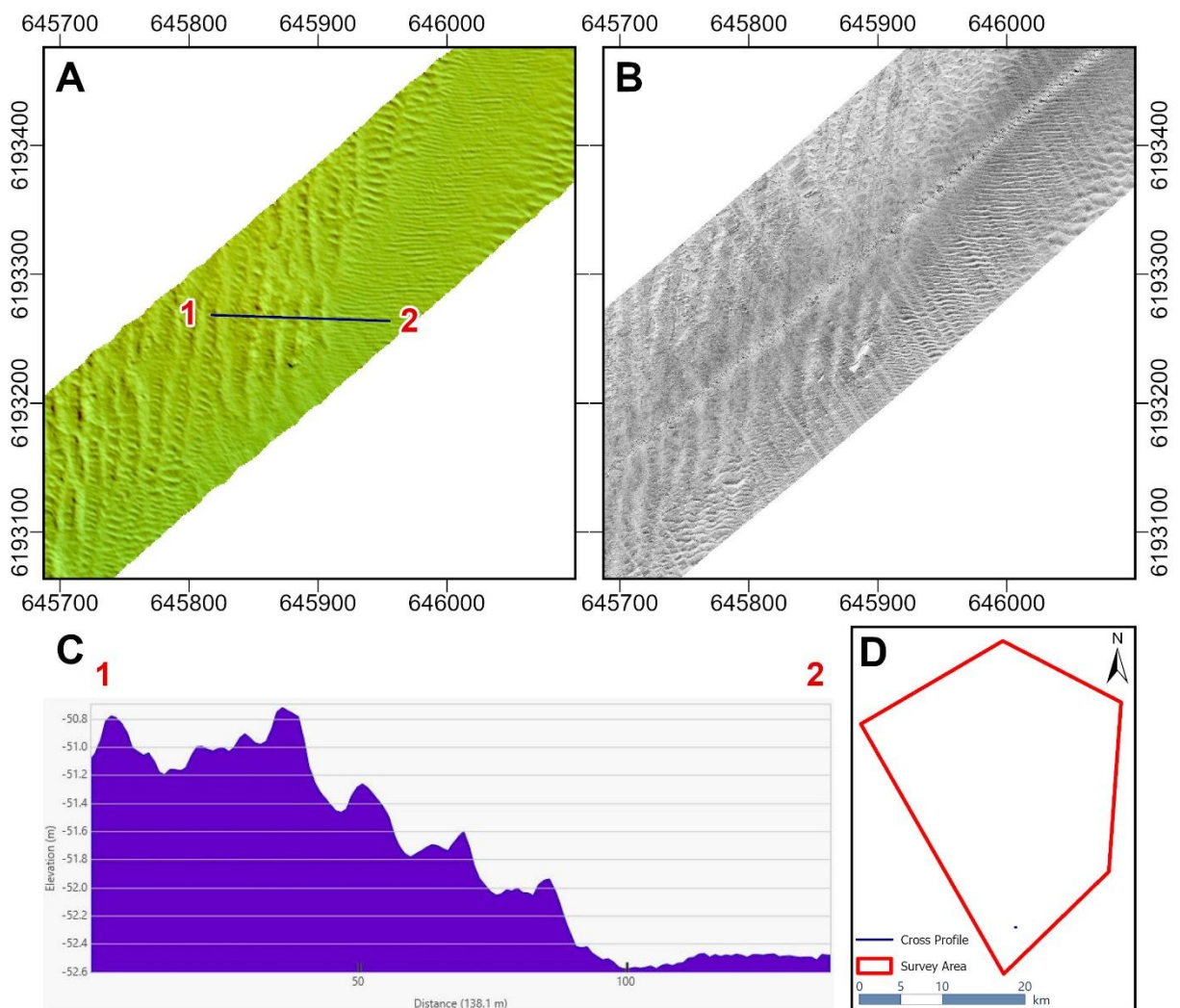


Figure 3.4: Sand waves within the MachairWind OWF survey area

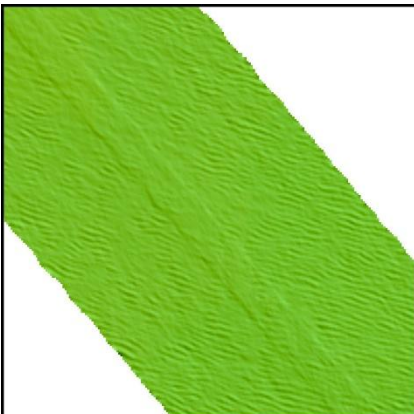
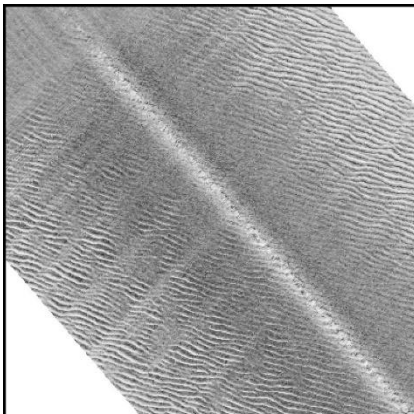
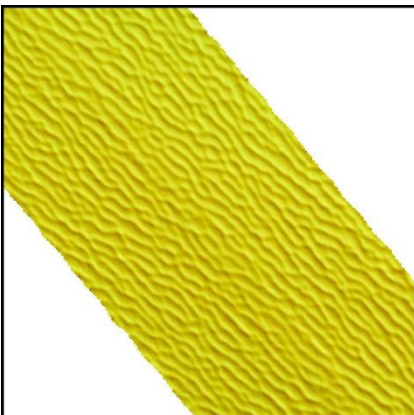
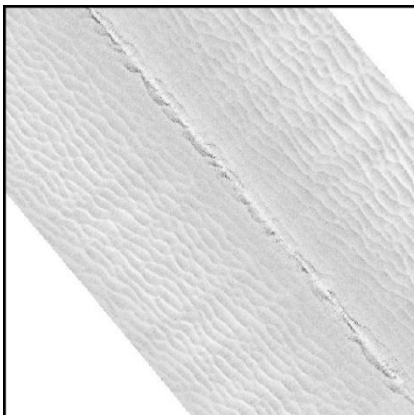
A – Shaded relief bathymetry. B – High Frequency side scan sonar. C – Cross profile. D – Location within the survey area


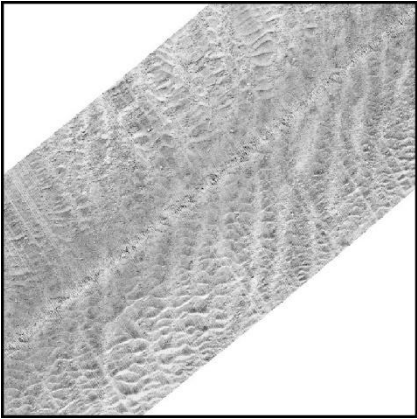
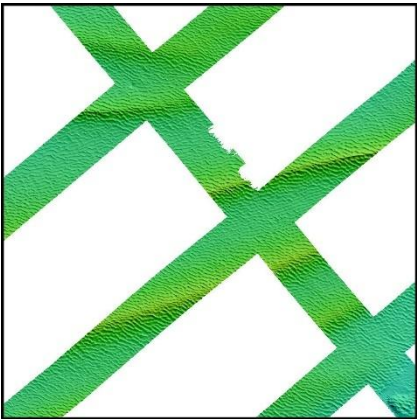
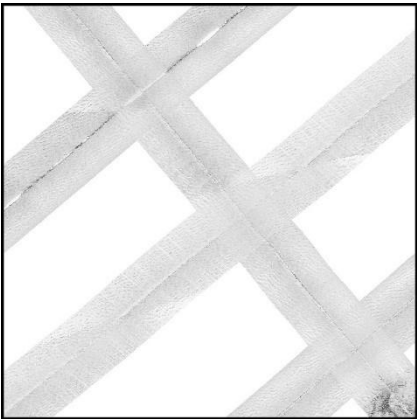
Large sand dunes are interpreted in the north of the site, covering the area west of the lighthouse and north of the bathymetric high in the south-west, with heights up to ~12.3 m and wavelengths up to ~3500 m. The crests of the dunes are oriented approximately east to west, with asymmetry that indicates a generally north dominant flow. Superimposed mega ripples are observed along the stoss sided slopes.

Areas of hummocky seabed, indicative of turbulent flow are interpreted between the large sand dunes and adjacent to depression containing high reflectivity sediment.

Previous bathymetric data is available - EMODnet 2022 bathymetry. A direct comparison between the two datasets for sediment mobility is likely to be misleading. Large scale features such as sandwaves and dunes seem to consistent in terms of positioning, however no conclusions can be drawn regarding sediment mobility given the differences in gridding and resolution between the datasets. The presence of the observed features, from ripples to the large dunes, highlights that migration and re-orientation of those features could occur within the lifetime of a wind farm, resulting in exposure, spanning, and/or increased burial of infrastructure.

Table 3.3: Depositional features within MachairWind OWF survey area

Bathymetry Image	Side scan sonar HF Image	Feature Interpretation
		Ripples
		Mega ripples

Bathymetry Image	Side scan sonar HF Image	Feature Interpretation
		Sand waves
		Sand dunes

3.2.3.2 Outcrop Features

The following outcrop and related features are observed within the survey area:

- Bedrock outcrop;
- Glacial 'Till' outcrop.

Bedrock outcrops (Figure 3.5), often comprising well defined bathymetric highs are found in localised areas in the north, north-east, south-west, south and south-east of the site. These outcrops exhibit a relatively consistent appearance, being of moderate to high reflectivity, mottled irregular surfaces in SSS. The outcrops are better defined in the bathymetric data where they appear as prominent highs compared to the surrounding sediments. Indications of the structural fabric of the bedrock can be observed on MBES data. However, these indications alone or combined with the acoustic character of the 2D-UHR are not sufficient to differentiate rock types across the site.

Outright Glacial 'Till' outcrops (Figure 3.6) are less confidently identified within the SSS and bathymetric data as the sediment is thought to have been reworked in places. As such areas of numerous boulders are interpreted to represent the best proxy for 'Till' outcrops and / or reworked 'Till' sediments. Within the SSS data the 'Till' sediments exhibit high reflectivity with mottled irregular surface with large numbers of boulders, commonly surrounding bedrock

outcrops but occasionally as isolated bathymetric highs without observable bedrock outcrops. The bathymetric highs in the south-west and across the south and south-east of the site are dominated by probable 'Till' outcrops and areas of reworked 'Till' sediment.

For an overview of the rock outcropping across the site please see Appendix B.4 Seafloor Features Charts of the Geophysical Results Report (230633-MachairWind-V4).

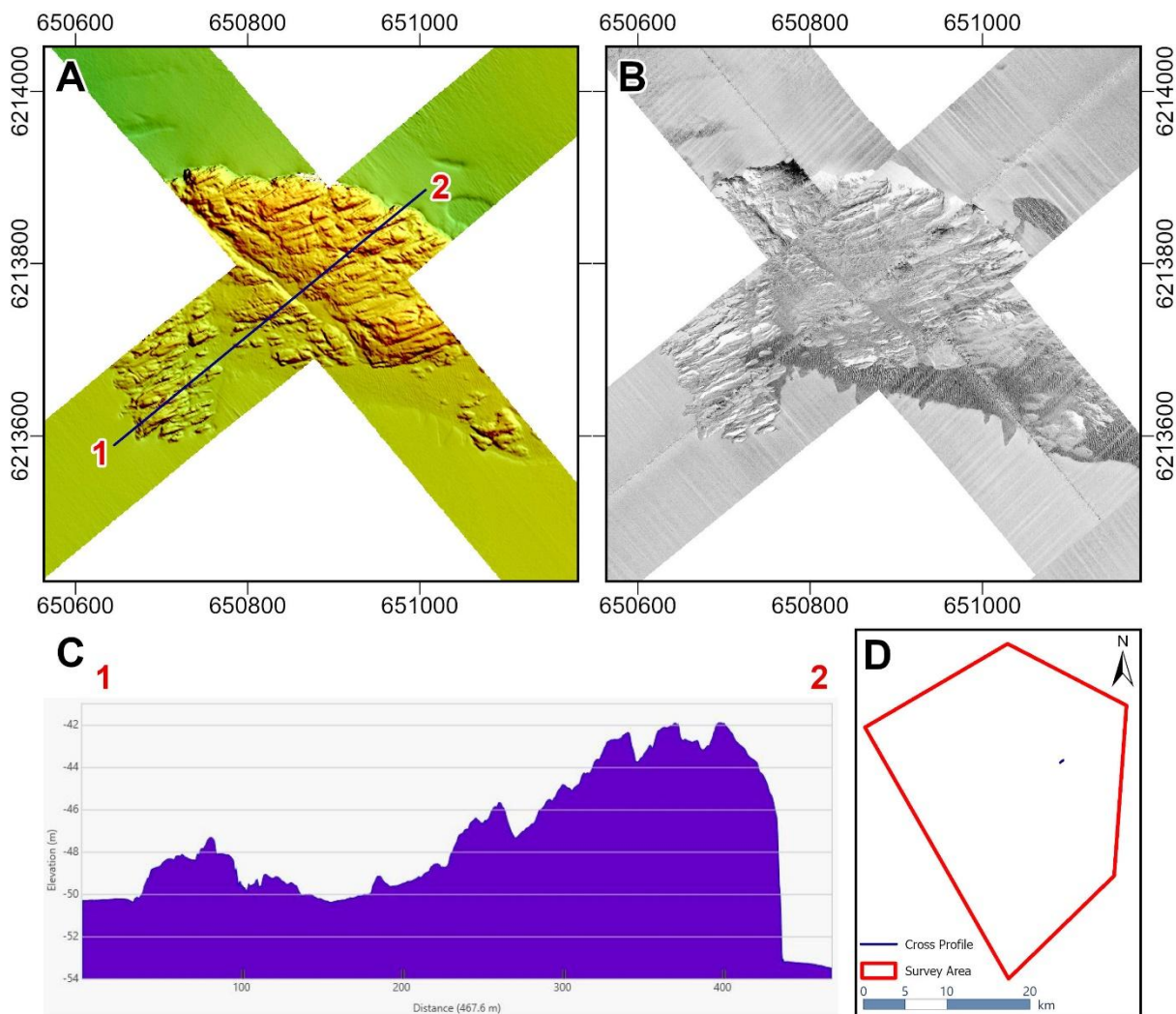


Figure 3.5: Bedrock outcrop within the MachairWind OWF survey area

A – Shaded relief bathymetry. B – High Frequency side scan sonar. C – Cross profile. D – Location within the survey area

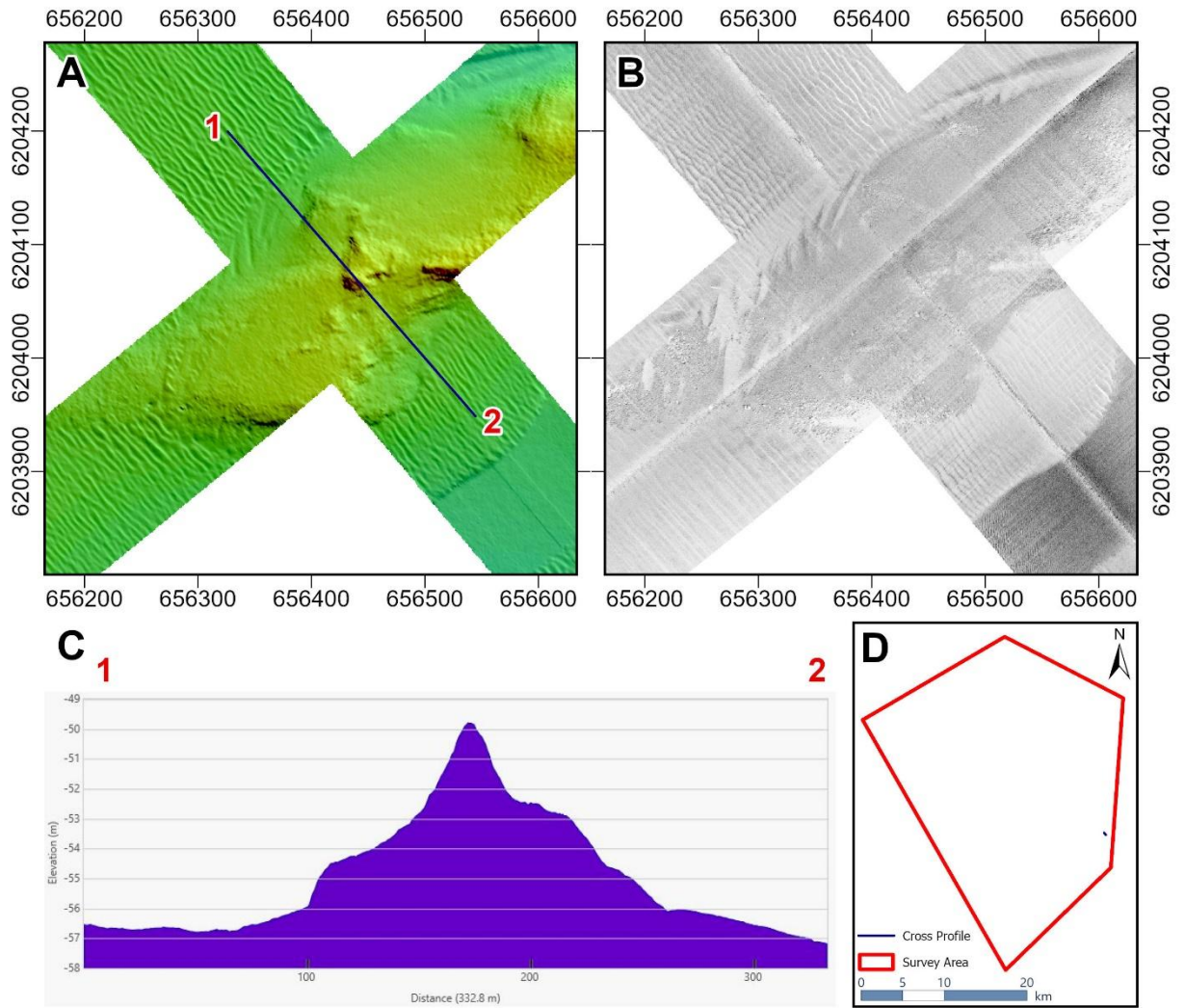


Figure 3.6: Glacial 'Till' outcrop within the MachairWind OWF survey area

A – Shaded relief bathymetry. B – High Frequency side scan sonar. C – Cross profile. D – Location within the survey area

3.2.3.3 Man-made Features

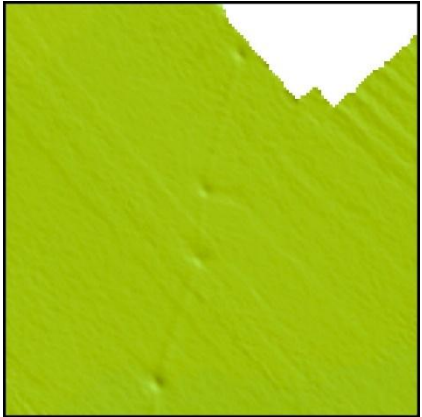
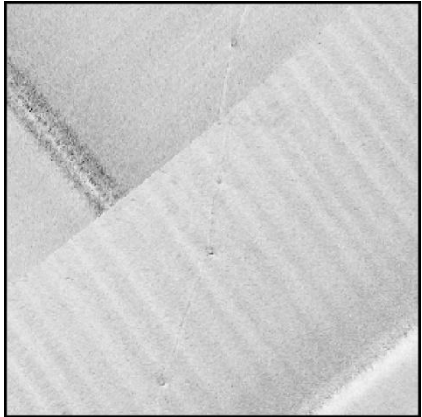
Several targets and seafloor features were observed in the SSS and MBES datasets that can be classified as potential man-made objects (MMOs).

Identified man-made objects within the study area include:

- Fish traps.
- Depressions associated with scouring around fish traps.
- Fishing net(s)
- Ships wreck and shipwreck debris

Seafloor features of anthropogenic origin are presented in Appendix B.4 Seafloor Features Charts of the Geophysical Results Report (230633-MachairWind-V4).

Table 3.4: Man-made features within the MachairWind OWF survey area

SSS Image	Bathymetry Image	Feature Interpretation
		<p>Fish traps with linear debris attached</p>

3.2.3.4 Seafloor Contacts

The following seafloor contacts were observed within the survey area:

- Boulders
- Debris
- Wrecks

A total of 8642 boulders were picked from the high frequency SSS data within the survey area, of which 4470 boulders were picked within areas of numerous boulders to indicate size distribution therein. The total area identified as areas of numerous boulders was 13.9523 km². The highest boulders were interpreted to be up to 5.3 m in height and are on average 0.43 m in height. The greatest density of boulders occurs north, south and south-west where the seafloor sediments comprise coarse to gravely-sand, gravels, cobbles and boulders. The lowest density of boulders is in the central-east of the survey area where the seafloor sediments comprise sand with shell fragments.

Within the survey area, 44 contacts were interpreted as items of suspected debris. Of these, 11 were interpreted as linear debris and 33 were interpreted as isolated items of debris. The largest item of linear debris is 257.6 m in length. It is interpreted to be a section of linear debris connecting several fish traps. The largest isolated debris object is 7.2 m x 1.1 m x 0.4 m (L x W x H). The item of debris with the greatest height is 4.8 m x 1.7 m x 2.2 m (L x W x H). The debris items have been delivered as listing (Appendix C1.1 in the Geophysical Results Report) and SSDM format.

One wreck (Figure 3.7) was found within the survey area at 641071.10E, 6221733.12N, which was on the Admiralty database and presented in in the geophysical results report – please see Appendix B.4 Seafloor Features Charts of the Geophysical Results Report (230633-MachairWind-V4).

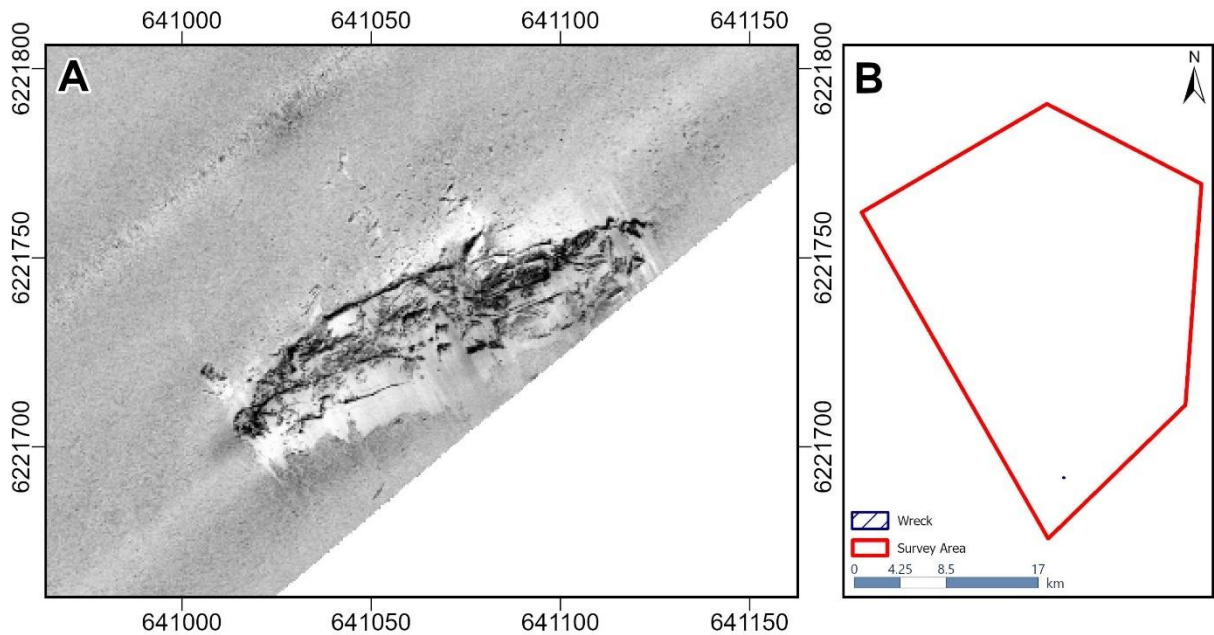


Figure 3.7: Example of the as-found wreck within the MachairWind OWF survey area

A – High Frequency side scan sonar. B – Location within the survey area

3.2.4 Magnetic Anomalies

A total of 72 magnetic anomalies were identified within the survey area. The magnetic anomalies had amplitudes up to 97.7 nT. None of the magnetic anomalies had a cross correlation with items of debris, identified from the SSS or MBES data. The cause of these magnetic anomalies is unknown, but the anomalies could represent buried objects – please see Appendix B.4 and C1.1 of the Geophysical Results Report (230633-MachairWind-V4).

The natural magnetic trends seen across the survey area are presented in Figure 3.8. These appear to correlate with areas of igneous geology and areas of outcrop. There are also linear magnetic trends in the south-west of the survey site, these could represent the igneous intrusions suspected to be in the area.

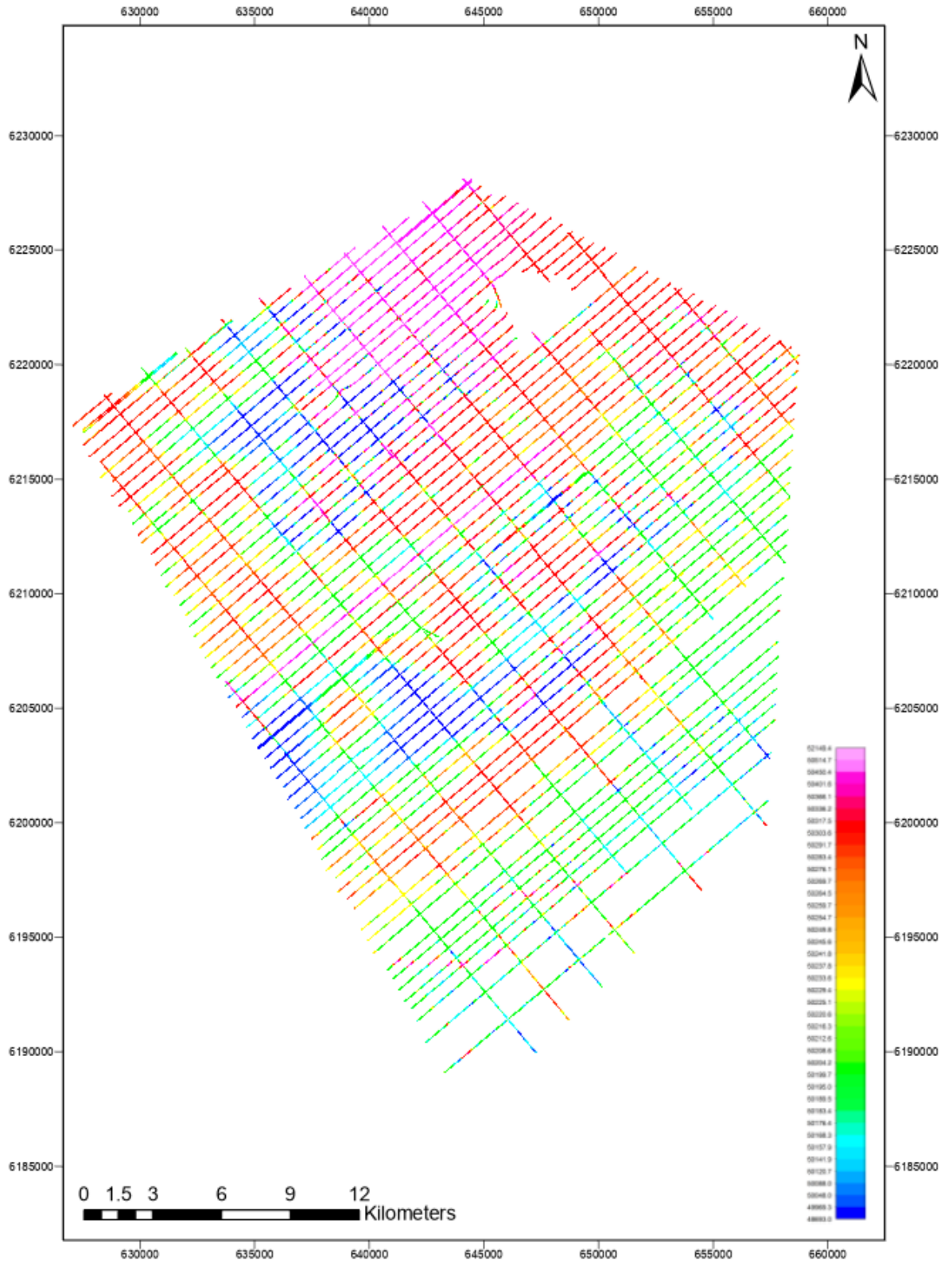


Figure 3.8: Natural magnetic (TF) trends indicating geology within the MachairWind OWF survey area

3.3 Environmental Results

Detailed logs of the completed transects and grab sampling stations can be found in Appendices B.2.1 and B.2.2.

Figure 3.9 displays the completed sampling stations.

3.3.1 Seafloor Photography

Photographic data were successfully acquired at 59 of the 62 proposed stations.

Stations MCW-D-ST90A, MCW-D-ST96A and MCW-D-ST97A were removed from the scope at the client's request due the stations being located within the 10 km visual impact boundary.

3.3.2 Sediment Sampling

Grab samples were successfully acquired at 57 of 62 proposed stations (Table 4.2).

Grab sampling was unsuccessful, or only partially successful, at two stations in Block C, namely stations MCW-C-ST83 and MCW-C-ST91, due to the presence of hard substratum. Specifically, no samples were acquired from station MCW-C-ST83 and only a single sample for PSD analysis was acquired from station MCW-C-ST91.

Three stations in Block D, namely MCW-D-ST90A, MCW-D-ST96A and MCW-D-ST97A were removed from the scope at the client's request due the stations being located within the 10 km visual impact boundary.

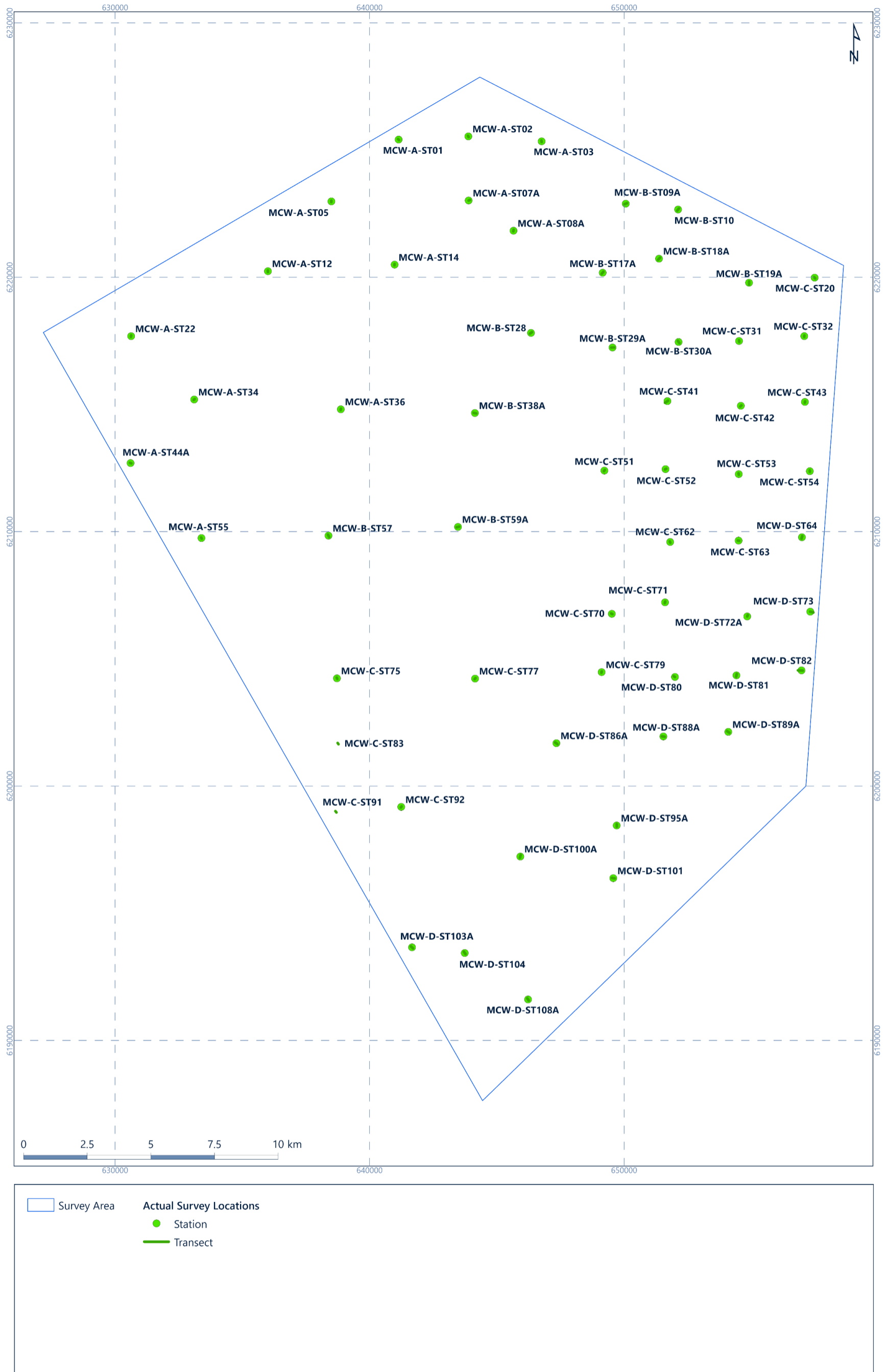


Figure 3.9: Completed environmental survey locations within the MachairWind OWF survey area

3.3.3 Seafloor Habitats and Fauna

The main sediment type observed was slightly gravelly sand, with varying proportions of shell fragments. This sediment type has been classified as the JNCC level 4 biotope complex 'Offshore circalittoral sand' (SS.SSa.OSa) from photographic and macrofaunal data. At stations where sampled sediments were acquired, the PSD largely supports the observations from photographic data with the sediment described as 'slightly gravelly sand' (Kaskela et al., 2019).

On transects where areas of coarser sediment were observed, the seafloor ranged from sediments comprising gravelly sand with shell fragments, to areas of cobbles and boulders interspersed with slightly gravelly sand and shell fragments. Where PSD data was available, sediments were described as 'gravelly sand'. These sediments have been classified as the JNCC level 4 biotope complex 'Offshore circalittoral coarse sediment' (SS.SCS.OCS).

Transects where areas of coarse sediment with cobbles and boulders interspersed with sand and higher numbers of echinoderms were observed have been classified as the JNCC level 4 biotope complex 'Echinoderms and crustose communities' (CR.MCR.EcCr). One section of transect MCW-D-ST73 was classified as a mosaic of 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) with 'Echinoderms and crustose communities on' (CR.MCR.EcCr). This section was classified as a mosaic due to the increase in coarse sediment, gravel and shell fragments between the cobbles and boulders. Whilst such sediments are classified within sand, it is likely that the grab sampling occurred in the areas of softer sediment in between the observed cobbles and boulders.

These sediment descriptions are consistent with the geophysical seafloor features interpretation that the dominant sediments were sand with a variable gravel and clay content, together with numerous cobbles and boulders.

Table 3.5 presents the classification hierarchy for the habitats observed within the survey area when photographic, PSD and macrofaunal data were considered. Sections 3.3.3.1 to 3.3.3.3 provide detailed descriptions of each biotope.

Table 3.6 summarises the physical and biological parameters characteristics of the biotopes assigned, along with example photographs. Figure 3.10 spatially presents the habitats observed across the survey area. Appendix G provides further example photographs.

Table 3.5: Habitat classifications within the MachairWind OWF survey area

JNCC (2022) Habitat Classification				Equivalent EUNIS (EEA, 2022) Classifications
Environment Level 1	Broad Habitat Level 2	Habitat Level 3	Biotope Complex Level 4	
Marine	CR Circalittoral rock	CR.MCR Moderate energy circalittoral rock	CR.MCR.EcCr Echinoderms and crustose communities	MC122: Echinoderms and crustose communities on Atlantic circalittoral rock
	SS Sublittoral sediment	SS.SCS Sublittoral coarse sediment	SS.SCS.OCS Offshore circalittoral coarse sediment	MD32 Atlantic offshore circalittoral coarse sediment
		SS.SSa Sublittoral sand and muddy sands	SS.SSa.OSa Offshore circalittoral sand	MD52 Atlantic offshore circalittoral sand
Notes EUNIS = European Nature Information System JNCC = Joint Nature Conservation Committee				

3.3.3.1 Echinoderms and crustose communities (CR.MCR.EcCr)

The JNCC level 4 biotope complex 'Echinoderms and crustose communities' (CR.MCR.EcCr) occurs on wave-exposed, moderately strong to weakly tide-swept, circalittoral bedrock and boulders. Echinoderms, faunal (*Parasmittina trispinosa*) and algal crusts (red encrusting algae) dominate this biotope, giving a sparse appearance. Typical echinoderms present are the starfish *Asterias rubens*, the brittlestar *Ophiothrix fragilis* and the sea urchin *Echinus esculentus*. There may be isolated clumps of the hydroids *Nemertesia antennina* and *Abietinaria abietina*, *Alcyonium digitatum*, the anemone *Urticina felina* and the cup coral *Caryophyllia smithii*' (JNCC, 2022).

The JNCC level 5 biotope *Ophiothrix fragilis* and/or *Ophiocomina nigra* brittlestar beds on sublittoral mixed sediment' (SS.SMx.CMx.OphMx) was considered due to the high number of echinoderms, specifically brittlestars *O. fragilis*. However, the PSD from these stations indicates that the sampleable sediments were slightly gravelly sand with no fines content, therefore a mixed sediment habitat type is unlikely.

Across the survey area, this biotope complex has been assigned to the entirety of transect MCW-C-ST83, and as a mosaic along a 116 m section of the transect surveyed at station MCW-D-ST73 (the latter in combination with 'Offshore circalittoral coarse sediment'; SS.SCS.OCS). Both transects were located towards the south of the survey area in water depths of between 48 m and 59 m LAT.

From photographic data combined with PSD, the coarser sediments observed at station MCW-D-ST73 were described as cobbles and boulders interspersed with slightly gravelly sand and shell fragments. The PSD data from the grab sample taken at this station was

classified as slightly gravelly sand, it is likely that the grab sampling occurred in the areas of softer sediment between the observed cobbles and boulders. Particle size distribution data was not available for MCW-C-ST83, the seafloor described from photographic data was recorded as coarse sediment with cobbles and boulders, interspersed with sand (Table 3.6 and Appendix C.3).

At both locations, where higher sonar reflectivity was observed, sediments comprised sandy gravel with shells and shell fragments, cobbles and boulders.

The most regularly observed taxa from the epibiota included brittlestars (Ophiuroidea including *Ophiothrix fragilis*), sea urchins (*E. esculentus*), starfish (*A. rubens*), crabs (*Cancer pagurus*), soft corals (*A. digitatum*) and cup corals (Caryophylliidae). Fish observed included snakeblenny (*Lumpenus lampretaeformis*) (Appendix C.3) Most of the taxa observed are characterising taxa of this biotope. Abundance of epifauna associated with this biotope complex (Appendix H.2) ranged from 'rare' (Pectinidae, *Calliostoma* sp.) to 'superabundant' (Ophiuroidea including *O. fragilis*) on the SACFOR abundance scale.

3.3.3.2 Offshore circalittoral coarse sediment (SS.SCS.OCS)

The JNCC level 4 biotope complex 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) is described as tide-swept circalittoral coarse sands, gravel and shingle at depths over 20 m. This habitat is characterised by robust infaunal polychaetes, mobile crustacea and bivalves (JNCC, 2022).

Across the survey area, this biotope complex has been assigned along the entirety, or sections of, six transects. Offshore circalittoral coarse sediment was also observed in a mosaic with 'Echinoderms and crustose communities' along a 116 m section of transect MCW-D-ST73. The transects where this habitat type occurred were sampled in water depths of between 49 m and 60 m LAT.

Particle size distribution data from grab samples described the seafloor at the majority of these stations as 'slightly gravelly sand' with station MCW-C-ST91 described as 'sandy gravel' and station MCW-D-108A described as 'gravel' (Table 3.6 and Appendix C.3).

Across all transects where this habitat type occurred, higher sonar reflectivity was observed, sediments comprised sandy gravel with shells and shell fragments, cobbles and infrequent boulders.

Infaunal analysis from stations MCW-A-ST08A, MCW-A-ST44A, MCW-D-ST73 and MCW-D-ST82 recorded species representative of offshore circalittoral sand. The characteristic taxa included annelids (*Sthenelais limicola*), arthropods (*Centraloecetes kroyeranus*), molluscs (*Abra prismatica*) and echinoderms (*Echinocyamus pusillus*; Appendix F). Of these taxa, *Sthenelais limicola* and *Abra prismatica* are characterising taxa of this biotope (Table 3.6).

The most regularly observed taxa from the epibiota observed from photographic data included brittlestars (Ophiuroidea), sea urchins (*E. esculentus*), starfish (Asteroidea inc.

Henricia sp., *Crossaster papposus*, *Marthasterias glacialis*), squat lobsters (*Munida* sp.), crabs (*Necora puber*, *Atelecyclus rotundatus*), soft corals (*A. digitatum*), cup corals (Caryophylliidae), barnacles (Sessilia), serpulid worms (Serpulidae) and faunal turf (Hydrozoa/Bryozoa) (Appendix C.3). Fish observed included dragonets (*Callionymus* sp.), flatfish (Pleuronectiformes), mackerel (*Scomber scombrus*) and unidentified species. Of these taxa, *Munida* sp., *N. puber*, *A. rotundatus* and Serpulidae are characterising taxa of the biotope (Table 3.6).

3.3.3.3 Offshore circalittoral sand (SS.SSa.Osa)

The JNCC level 4 biotope complex 'Offshore circalittoral sand' (SS.SSa.Osa) is described as offshore (deep) circalittoral habitats with fine sands or non-cohesive muddy sands. Fauna more likely to be found within these habitats include a diverse range of polychaetes, amphipods, bivalves, and echinoderms (JNCC, 2022).

From photographic data combined with PSD data, slightly gravelly sand with small scale ripples and shell fragments was reported at 55 stations. This corresponded with low reflectivity on SSS which has been interpreted as sand with shell fragments. Water depths within this area ranged from 44 m to 106 m LAT.

Infaunal analysis from 37 of the 55 stations recorded species representative of offshore circalittoral sand. The characteristic taxa included annelids (*Spiophanes bombyx*, *Chaetozone christiei*, *Lumbrineris cingulata*, *Galathowenia oculata*, *Myriochele danielsseni*, *Sthenelais limicola* and *Magelona filiformis*), arthropods (*Centraloecetes kroyeranus* and *Bathyporeia elegans*) and echinoderms (*Echinocyamus pusillus*) (Appendix F). These taxa are characterising taxa of this biotope (Table 3.6).

The most regularly observed taxa from the epibiota observed from photographic data included starfish (*A. rubens*, *Luidia sarsii*, *Luidia ciliaris* and *Astropecten irregularis*), hermit crabs (Paguroidea), crabs (*Cancer pagurus* and *Liocarcinus* sp.), shrimp (Caridea), cephalopods (Cephalopoda including Loliginidae and *Sepiola* sp.) and rays (Rajiformes including *Raja clavata*) (Appendix C.3). Fish observed included dragonets (*Callionymus* sp.), mackerel (*Scomber scombrus*), Atlantic herring (*Clupea harengus*), whiting (*Merlangius merlangus*), thickback sole (*Microchirus variegatus*), solenette (*Buglossidium luteum*), plaice (*Pleuronectes platessa*) and dab (*Limanda limanda*). Of these taxa, *A. rubens*, *L. sarsii*, *L. ciliaris* and *A. irregularis* are characterising taxa of the biotope (Table 3.6).

Table 3.6: Summary of JNCC habitat classifications within the MachairWind OWF survey area

JNCC Habitat Classification (JNCC, 2022)	Distribution	Physical Characteristics	Biological Characteristics	Example Photograph
(CR.MCR.EcCr) Echinoderms and crustose communities	Stations: MCW-C-ST83, MCW-D-ST73*	Mean gravel†: - Mean sand†: - Mean mud†: - 'Slightly gravelly sand'‡ Bathymetry: 48 - 57 m LAT	Mean number of taxa†: - Mean number of individuals†: - Characteristic taxa†: - Characteristic taxa‡: Ophiuroidea Mean Biomass†: -	
(SS.SCS.OCS) Offshore circalittoral coarse sediment	Stations: MCW-A-ST08A, MCW-A-ST44A*, MCW-B-ST57*, MCW-C-ST91, MCW-D-ST73*, MCW-D-ST82*, MCW-D-ST108A	Mean gravel†: 52.78 % Mean sand†: 47.22 % Mean mud†: 0.00 % 'Slightly gravelly sand'‡ Bathymetry: 49 – 60 m LAT	Mean number of taxa†: 32 per 0.1 m² Mean number of individuals†: 76 per 0.1 m² Characteristic taxa†: <i>Echinocyamus pusillus</i> , <i>Sthenelais limicola</i> , <i>Abra prismatica</i> Characteristic taxa‡: <i>Munida sp.</i> , <i>Necora puber</i> , <i>Atelecyclus rotundatus</i> , <i>Serpulidae</i> Mean Biomass†: 0.0.0437	
(SS.SSa.OSa) Offshore circalittoral sand	Stations: MCW-A-ST01, MCW-A-ST02, MCW-A-ST03, MCW-A-ST05, MCW-A-ST07A, MCW-A-ST12, MCW-A-ST14, MCW-A-ST22, MCW-A-ST34, MCW-A-ST36, MCW-A-ST44A, MCW-A-ST55, MCW-B-ST09A, MCW-B-ST010, MCW-B-ST017A, MCW-B-ST018A, MCW-B-ST019A, MCW-B-ST28, MCW-B-ST29A, MCW-B-ST30A, MCW-B-ST38A, MCW-B-ST57, MCW-B-ST59A, MCW-C-ST20, MCW-C-ST31, MCW-C-ST32, MCW-C-ST41, MCW-C-ST42, MCW-C-ST43, MCW-C-ST51, MCW-C-ST52, MCW-C-ST53, MCW-C-ST54, MCW-C-ST62, MCW-C-ST63, MCW-C-ST70, MCW-C-ST71, MCW-C-ST75, MCW-C-ST77, MCW-C-ST79, MCW-C-ST92, MCW-D-ST64, MCW-D-ST72A, MCW-D-ST73, MCW-D-ST80, MCW-D-ST81, MCW-D-ST82, MCW-D-ST86A, MCW-D-ST88A, MCW-D-ST89A, MCW-D-ST95A, MCW-D-ST100A, MCW-D-ST101, MCW-D-ST103A, MCW-D-ST104	Mean gravel†: 0.73 % Mean sand†: 98.52 % Mean mud†: 0.75 % 'Slightly gravelly sand'‡ Bathymetry: 44 - 106 m LAT	Mean number of taxa†: 27 per 0.1 m² Mean number of individuals†: 74 per 0.1 m² Characteristic taxa†: <i>Spiophanes bombyx</i> , <i>Echinocyamus pusillus</i> , <i>Chaetozone christiei</i> Characteristic taxa‡: Paguroidea, <i>Asterias rubens</i> , <i>Astropecten irregularis</i> Mean Biomass†: 0.4315	

Notes
 Biomass expressed as ash free dry weight in g/0.1 m² grab sample
 JNCC = Joint Nature Conservation Committee
 LAT = Lowest Astronomical Tide
 * = Samples acquired in sandy sediment
 † = Data from grab analysis. Mean values generated for sample/station data within multivariate grouping of macrofaunal community
 ‡ = Data from photographic analysis

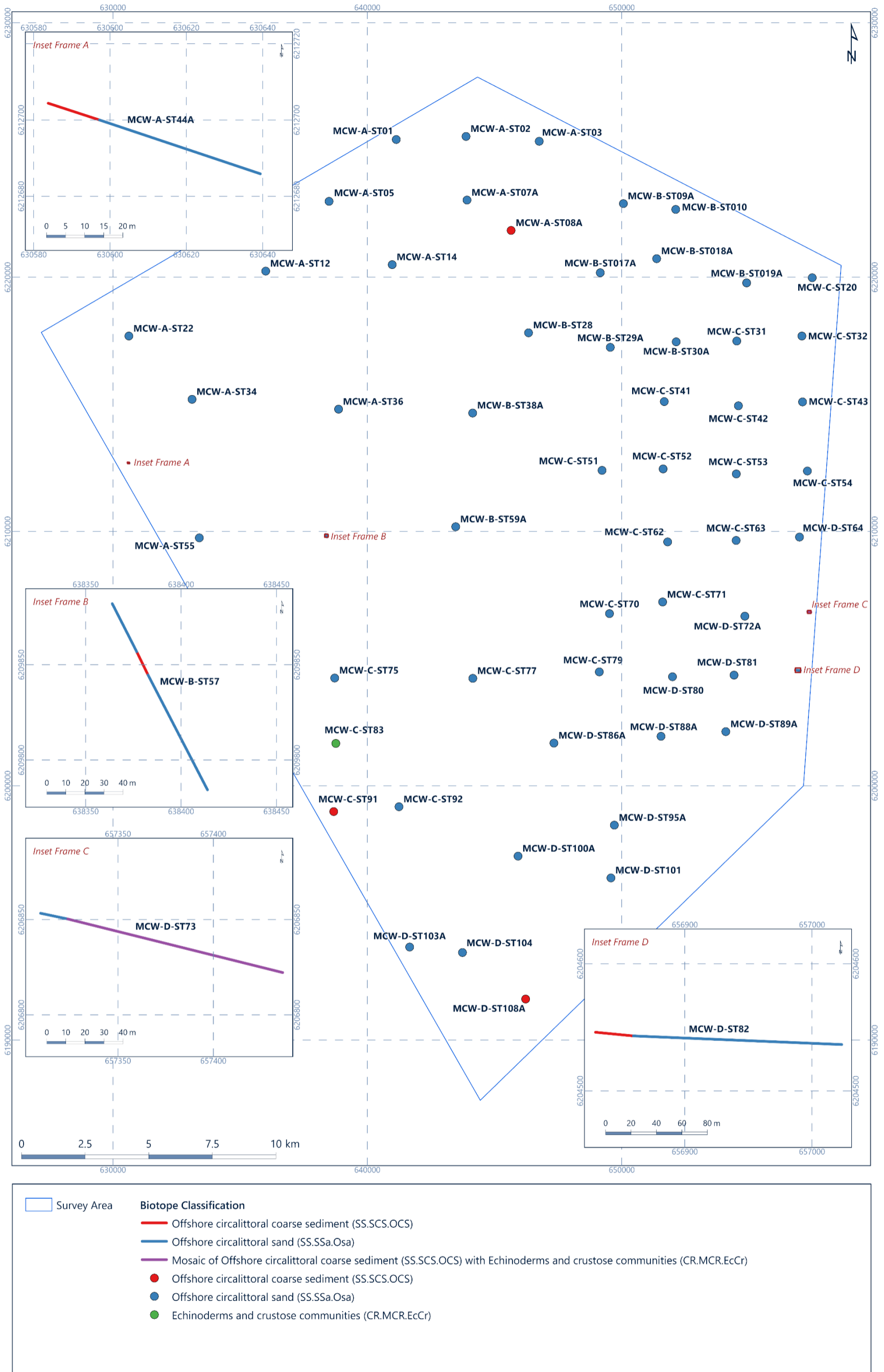


Figure 3.10: The spatial distribution of EUNIS habitat classifications (EEA, 2019) within the MachairWind OWF survey area

3.3.4 Potential Sensitive Habitats and Species

3.3.4.1 Stony Reef

Areas of cobbles and boulders at five transects (MCW-A-ST08A, MCW-D-ST73, MCW-D-ST82, MCW-C-ST83 and MCW-C-ST91) were further assessed for possible resemblance to Annex I Stony reef. The reef assessment was undertaken following the guidance detailed in Appendix D.3.1.

Along areas of transects MCW-D-ST73, MCW-D-ST82 and MCW-C-ST83, the composition of cobbles and boulders was in the range of 'medium' (40 % to 95 %) with an elevation of 'medium' (64 mm to 5 m) (Table 3.7).

The majority of occurrences of 'medium reef', as based on both cover and elevation data, were sporadic and covered short distances within the transects, interspersed with sections of 'low reef'. From photographic data, a reef mosaic (low and medium) of 48 m² was observed on transect MCW-D-ST82, 76 m² on MCW-C-ST83 and 200 m² on transect MCW-D-ST73. Within these sections, combined areas of 'medium reef' observed were less than 25 m² on transects MCW-D-ST73 and MCW-D-ST82, but more than 25 m² on transect MCW-C-ST83. Whilst it cannot be confirmed if 'medium reef' alone satisfies the area criterion (which states that reefs must be > 25 m²; Golding et al., 2020) on transects MCW-D-ST73 and MCW-D-ST82, this criteria is met for 'medium reef' on transect MCW-C-ST83 (and for the reef mosaic on the former two transects).

When potential stony reef extents were delineated from geophysical data, areas ranged from 5 566 m² in the vicinity of station MCW-D-ST82, through 20 799 m² in the vicinity of station MCW-D-ST73, to 26 361 m² in the vicinity of station MCW-C-ST83.

Numerous large boulders, cobbles and pebbles were observed in sections classified as 'medium reef', interspersed between mixed sediments and areas of 'low reef'. Abundance of epifauna associated with stony reefs (Appendix H.2) ranged from 'rare' (Pectinidae, *Calliostoma* sp.) to 'superabundant' (Ophiuroidea including *O. fragilis*).

Table 3.7 summarises the results of the proportions of each reefiness classification along each transect. Figures 3.1 to Figure 3.13 show the stony reef assessment on transects MCW-D-ST73, MCW-D-ST82 and MCW-C-ST83 (where composition and elevation only are considered) and potential stony reef extents.

Appendix H.1 provides the detailed stony reef assessment. Appendix H.2 presents the results of epifaunal counts within reef areas.

Table 3.7: Summary of 'reefiness' classifications within the MachairWind OWF survey area

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W									
Transect	SOL Easting	SOL Northing	EOL Easting	EOL Northing	% Cover cobbles and boulders	Elevation	Biota	Area Observed [m ²]	Overall Assessment
MCW-A-ST08A	645 659.5	6 221 867.8	645 654.4	6 221 840.7	< 10	Flat seafloor	< 80	33	Not a Reef
	645 654.4	6 221 840.7	645 647.0	6 221 804.0	< 10	Flat seafloor	< 80	45	Not a Reef
MCW-D-ST73	657 309.5	6 206 853.3	657 323.7	6 206 850.3	< 10	Flat seafloor	< 80	25	Not a Reef
	657 323.7	6 206 850.3	657 326.1	6 206 849.7	10 – 40	< 64 mm	< 80	4	Low reef
	657 326.1	6 206 849.7	657 328.1	6 206 849.4	10 – 40	64 mm – 5 m	< 80	3	Low reef
	657 328.1	6 206 849.4	657 331.3	6 206 848.2	10 – 40	< 64 mm	< 80	6	Low reef
	657 331.3	6 206 848.2	657 335.3	6 206 846.6	10 – 40	64 mm – 5 m	< 80	7	Low reef
	657 335.3	6 206 846.6	657 339.3	6 206 845.3	40 – 95	64 mm – 5 m	< 80	7	Medium reef
	657 339.3	6 206 845.3	657 374.0	6 206 838.3	10 – 40	64 mm – 5 m	< 80	60	Low reef
	657 374.0	6 206 838.3	657 375.6	6 206 838.0	40 – 95	64 mm – 5 m	< 80	3	Medium reef
	657 375.6	6 206 838.0	657 386.2	6 206 835.1	10 – 40	64 mm – 5 m	< 80	19	Low reef
	657 386.2	6 206 835.1	657 389.8	6 206 834.2	10 – 40	< 64 mm	< 80	6	Low reef
	657 389.8	6 206 834.2	657 399.3	6 206 831.1	10 – 40	64 mm – 5 m	< 80	17	Low reef
	657 399.3	6 206 831.1	657 400.7	6 206 830.7	40 – 95	64 mm – 5 m	< 80	2	Medium reef
	657 400.7	6 206 830.7	657 415.9	6 206 827.1	10 – 40	64 mm – 5 m	< 80	26	Low reef
	657 415.9	6 206 827.1	657 421.6	6 206 825.7	40 – 95	64 mm – 5 m	< 80	10	Medium reef
	657 421.6	6 206 825.7	657 436.4	6 206 822.2	10 – 40	64 mm – 5 m	< 80	26	Low reef
MCW-D-ST82	656 829.8	6 204 546.1	656 834.4	6 204 545.2	10 – 40	64 mm – 5 m	< 80	8	Low reef
	656 834.4	6 204 545.2	656 837.5	6 204 544.6	40 – 95	64 mm – 5 m	< 80	5	Medium reef
	656 837.5	6 204 543.2	656 859.6	6 204 543.2	10 – 40	64 mm – 5 m	< 80	35	Low reef
	656 859.6	6 204 543.2	657 023.4	6 204 536.5	< 10	Flat seafloor	< 80	262	Not a Reef
MCW-C-ST83	638 745.9	6 201 691.5	638 747.0	6 201 688.3	< 10	< 64 mm	< 80	6	Not a Reef
	638 747.0	6 201 688.3	638 748.4	6 201 686.0	10 – 40	64 mm – 5 m	< 80	4	Low reef
	638 748.4	6 201 686.0	638 762.3	6 201 667.1	40 – 95	64 mm – 5 m	< 80	33	Medium reef
	638 762.3	6 201 667.1	638 763.1	6 201 666.1	10 – 40	64 mm – 5 m	< 80	2	Low reef
	638 763.1	6 201 666.1	638 771.9	6 201 654.2	40 – 95	64 mm – 5 m	< 80	21	Medium reef
	638 771.9	6 201 654.2	638 772.8	6 201 652.4	10 – 40	64 mm – 5 m	< 80	3	Low reef
	638 772.8	6 201 652.4	638 773.4	6 201 651.2	40 – 95	64 mm – 5 m	< 80	2	Medium reef
	638 773.4	6 201 651.2	638 778.0	6 201 644.4	10 – 40	64 mm – 5 m	< 80	12	Low reef
638 778.0	6 201 644.4	638 780.5	6 201 642.1	< 10	< 64 mm	< 80	7	Not a Reef	
MCW-C-ST91	638 656.9	6 199 012.8	638 699.7	6 198 961.7	< 10	Flat seafloor	< 80	96	Not a Reef

Key:

Not a Reef	Low Reef	Medium Reef	High Reef
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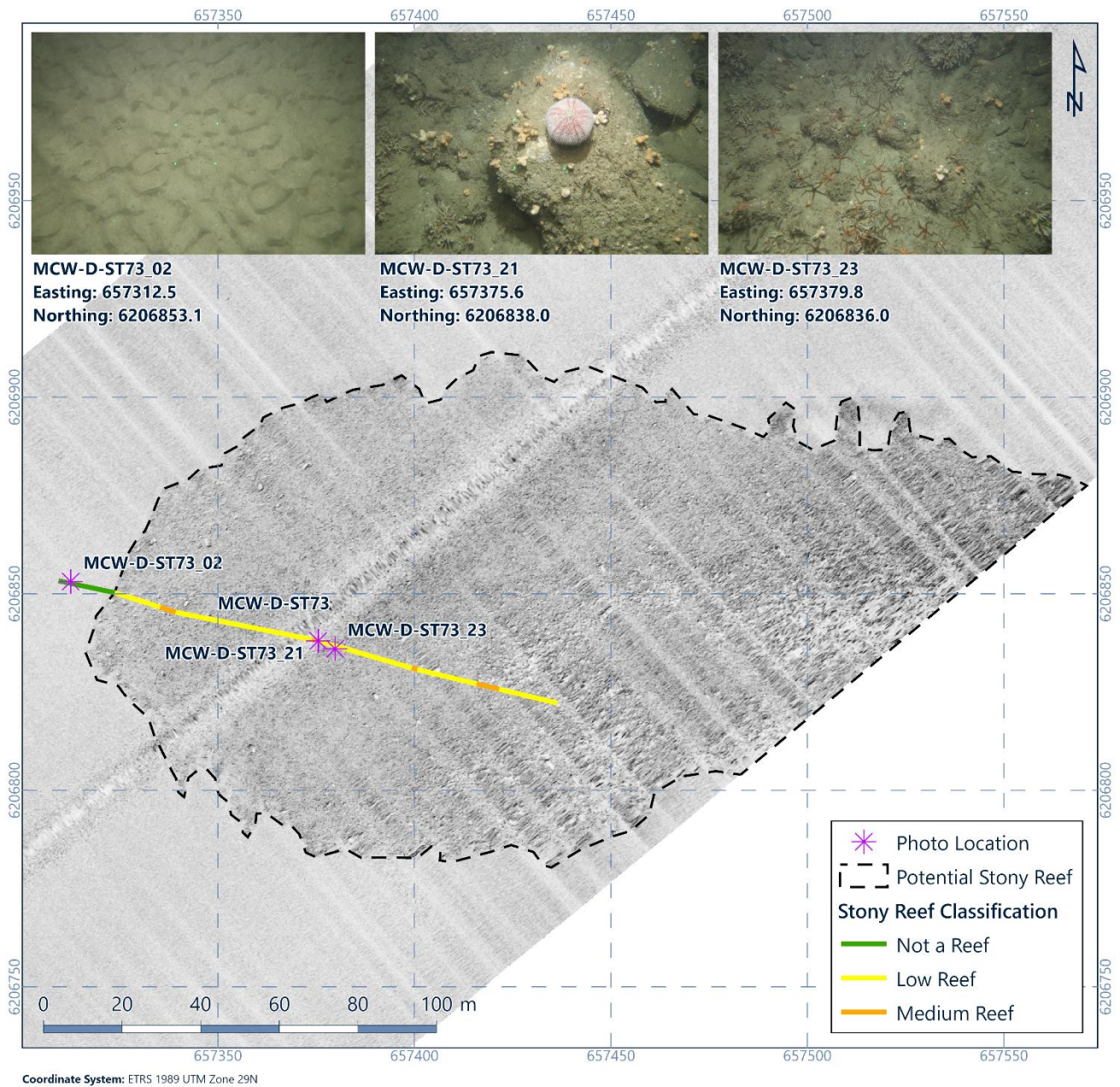


Figure 3.11: Stony reef assessment at transect MCW-D-ST73, from composition and elevation only, with potential full extent of the stony reef extrapolated on a side scan sonar mosaic

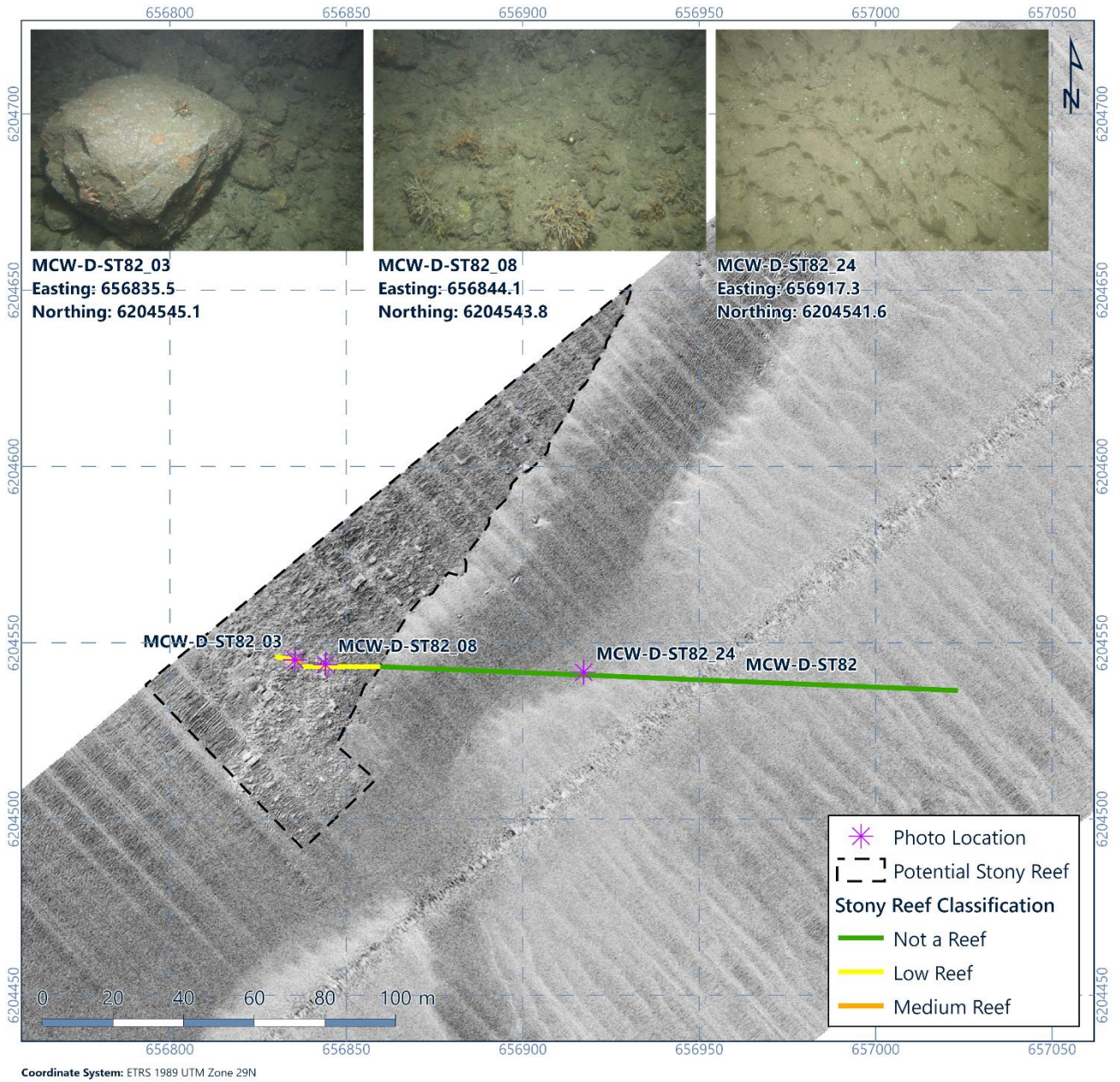


Figure 3.12: Stony reef assessment at transect MCW-D-ST82, from composition and elevation only, with potential full extent of the stony reef extrapolated on a side scan sonar mosaic

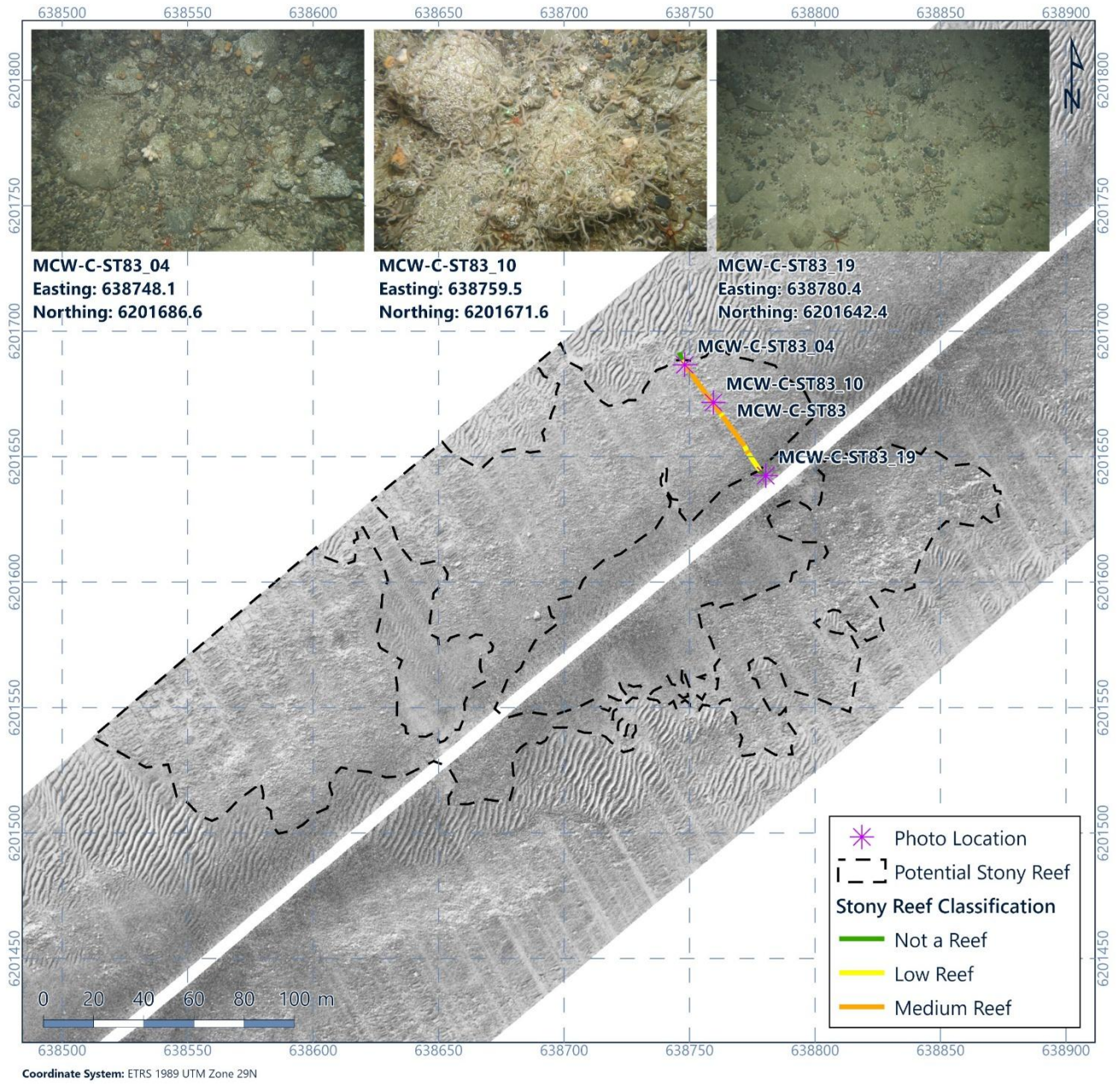


Figure 3.13: Stony reef assessment at transect MCW-C-ST83, from composition and elevation only, with potential full extent of the stony reef extrapolated on a side scan sonar mosaic

3.3.4.2 *Arctica islandica* (Ocean quahog)

While *Arctica islandica* resides beneath the seafloor surface as an infaunal organism, its filter-feeding behaviour allows for the identification of its siphons in seafloor photography data. Ragnarsson and Thórarinsdóttir (2002) proposed that seafloor photography offers superior data for estimating *A. islandica* abundance compared to trawling. In the current survey, all photographic data was analysed for *A. islandica* siphon evidence. Nonetheless, relying entirely on abundance estimates from seafloor photography data is cautioned due to the periodic deep burrowing of ocean quahogs, rendering their siphons invisible on the sediment surface (Taylor, 1976). Factors such as prolonged food absence, particularly during winter, have been suggested to prompt them to bury deeper in sediments, reducing their metabolic rate for extended periods (Oeschger, 1990; Theede et al., 1969).

Analysis of seafloor photographic and macrofaunal data was conducted to determine the potential presence of the OSPAR threatened and/or declining species *A. islandica*. From the seafloor photographs alone, live *A. islandica* siphons were visible at the sediment surface at transects MCW-A-ST05 and MCW-C-ST79 and empty *A. islandica* shells were observed on the sediment at 17 transects. When assessed against the 3 cm to 15 cm size category, as recommended for SACFOR (based on the size of the adult), *A. islandica* were classified as 'occasional' at four transects and 'rare' at transect MCW-B-ST10 from photographic data (Table 3.8). The bivalves' inclination to retract their siphons beneath the sediment for extended durations means that reliance solely on seafloor photography estimates is not entirely dependable.

The sediment grab macrofauna analysis provides the most reliable data for assessing *A. islandica* density. The *A. islandica* abundance data were categorized into adult and juvenile forms. To facilitate analysis and given the absence of size-at-maturity information, individuals with a diameter less than 10 mm were considered juveniles.

The presence of adult *A. islandica* was confirmed at 7 stations in the offshore grab samples. Juvenile *A. islandica* were recorded at a further 10 stations following macrofaunal analysis although it must be taken into account that juveniles may not survive to adulthood.

When considering the grab data, juveniles and adults were categorised as 'abundant' at all stations (Table 3.9). It must be noted that the small area (0.1 m²) sampled at each station will likely have resulted in an overestimate of abundance due to the broad nature of the SACFOR categories.

Table 3.8: Abundance of *Arctica islandica* and SACFOR assessment from photographic data within the MachairWind OWF survey area

Transect	Number per transect	Total Surface Area Observed [m ²]	SACFOR
MCW-A-ST05	1*	56.1	O
MCW-A-ST07A	1 [†]	55.3	O
MCW-B-ST10	1 [†]	119.1	R
MCW-C-ST20	1 [†]	74.3	O
MCW-C-ST79	1*	75.9	O
<p>Notes</p> <p>SACFOR Classifications: (3 cm to 15 cm)</p> <p>Superabundant = 1 - 9/0.01 m²</p> <p>Abundant = 1 - 9/0.1 m²</p> <p>Common = 1 - 9/1 m²</p> <p>Frequent = 1 - 9/10 m²</p> <p>Occasional = 1 - 9/100 m²</p> <p>Rare = 1 - 9/1000 m²</p>			
<p>SACFOR Classification based on the assumption that adults achieve a size of 3 cm to 15 cm</p> <p>* = Siphons observed</p> <p>† = Whole shell in sediment</p>			

Table 3.9: Abundance of *Arctica islandica* adults and juveniles and SACFOR assessment from grab samples within the MachairWind OWF survey area

Station	Adults (> 10 mm)	Juveniles (< 10 mm)	Total Surface Area Observed [m ²]	SACFOR
MCW-A-ST01	-	1	0.1	Abundant
MCW-A-ST03	1	-	0.1	Abundant
MCW-B-ST10	-	2	0.1	Abundant
MCW-B-ST19A	-	3	0.1	Abundant
MCW-B-ST30A	-	2	0.1	Abundant
MCW-C-ST32	1	-	0.1	Abundant
MCW-C-ST41	-	1	0.1	Abundant
MCW-C-ST42	1	-	0.1	Abundant
MCW-C-ST52	-	2	0.1	Abundant
MCW-C-ST53	1	1	0.1	Abundant
MCW-C-ST54	-	2	0.1	Abundant
MCW-C-ST79	1	-	0.1	Abundant
MCW-D-ST73	1	-	0.1	Abundant
MCW-D-ST80	-	1	0.1	Abundant
MCW-D-ST81	1	-	0.1	Abundant
MCW-D-ST88A	-	2	0.1	Abundant
<p>Notes</p> <p>SACFOR Classifications: (3 cm to 15 cm)</p> <p>Superabundant = 1 - 9/0.01 m²</p> <p>Abundant = 1 - 9/0.1 m²</p> <p>Common = 1 - 9/1 m²</p>				

Station	Adults (> 10 mm)	Juveniles (< 10 mm)	Total Surface Area Observed [m ²]	SACFOR			
Frequent = 1 - 9/10 m ² Occasional = 1 - 9/100 m ² Rare = 1 - 9/1000 m ²							
SACFOR Classification based on the assumption that adults achieve a size of 3 cm to 15 cm							
Key	- = Absent	R = Rare	O = Occasional	F = Frequent	C = Common	A = Abundant	S = Superabundant

3.3.4.3 Subtidal Sands and Gravel

Sand and gravel sediments are the most common subtidal habitat around the UK coastline. The diversity of flora and fauna living within these habitats varies according to the level of environmental stress to which they are exposed, with offshore subtidal sands and gravels considered more stable than their shallower equivalents. Sands and gravels feature a higher biodiversity often with a range of anemones, polychaetes, bivalves, amphipods, and both mobile and sessile epifauna. These habitat types support numerous fish/shellfish taxa including sand eels, flatfish and bass, (OSPAR 2010).

The JNCC level 4 biotope complex 'Offshore circalittoral sand' (SS.SSa.OSa) and 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) were present within the survey area (Section 3.3.3). and therefore the UK BAP priority habitat and MCZ FOCI 'Subtidal sands and gravels' may be present.

Epifauna observed on sand within the survey area included starfish (Asteroidea including *Asterias rubens*), hermit crabs (Paguroidea). crabs (Brachyura including *Cancer pagurus*, *Necora puber*, *Liocarcinus* sp.) and fish including flatfish, gurnards and dragonets (Osteichthyes including Pleuronectiformes, Triglidae and *Callionymus* sp.), all of which are characteristic of this priority habitat.

3.3.4.4 Other Potentially Sensitive Habitats and Species

The habitat types described throughout much of the survey area may occur within the broad habitat of 'Subtidal sands and gravels', a UK BAP habitat and a PMF.

From the video analysis, individuals belonging to the family Gadidae were observed on four transects (Appendix C.3), indicating the potential presence of the Atlantic cod *Gadus morhua*, a UK BAP and PMF species. *G. morhua* is also on the OSPAR list of threatened and/or declining habitats and species for regions II and III, the survey area being part of OSPAR region III.

Two individuals belonging to the family Rajidae were observed at transects MCW-A-ST02 and MCW-D-ST88A, indicating the potential presence of *Raja clavata*, *R. undulata* and *R. montagui*. The individual at transect MCW-A-ST02 was confirmed to be the species *R. clavata*. *R. undulata* is a UK BAP priority marine species, whilst *R. clavata* and *R. montagui*

are on the OSPAR list of threatened and/or declining habitats and species for Regions II and III.

Other UK BAP species and PMF species observed during the video analysis included mackerel (*Scomber scombrus*) at nine transects, Atlantic herring (*Clupea harengus*) at four transects, European plaice (*P. platessa*) at four transects and whiting (*Merlangius merlangus*) at two transects.

The lesser sand eel *Ammodytes marinus*, is also a UK BAP priority species (JNCC, 2018). Sand eels (Ammodytidae) were observed in video data captured in transects MCW-A-ST36, MCW-B-ST09A, MCW-B-ST10 and MCW-D-ST86A. It is not possible to identify sand eels to species level from photographic data, therefore the species of sand eel present at these transects cannot be confirmed. However, two *Ammodytes marinus* individuals were recorded within the macrofauna data at transects MCW-C-ST42 and MCW-D-ST101, laboratory analysis confirmed the identification.

Anemones of the family Edwardsiidae were recorded within the survey area by grab sampling at 21 transects, indicating the possible presence of the UK BAP species *Edwardsia timida* (JNCC, 2019c).

Except for the Ocean quahog *A. islandica*, these species are also listed in the Scottish biodiversity list.

No other Annex I habitats or Annex II species, OSPAR threatened and/or declining species and habitats, or UK Priority Habitats and Species and Scottish biodiversity list species and habitats were observed within the survey areas.

3.3.5 Environmental Discussion

From photographic data, the seafloor in the MachairWind survey area mainly comprised slightly gravelly sand with varying degrees of gravel, shell fragments, cobbles and boulders. With consideration of available PSD data, where applicable, three JNCC habitat types were observed within the MachairWind survey area: 'Offshore circalittoral sand' (SS.SSa.OSa), 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) and 'Echinoderms and crustose communities' (CR.MCR.EcCr). The latter biotope was limited in distribution, occurring along small sections of two transects. From the photographic data, depths across the survey area ranged from 44 m to 106 m LAT, consistent with offshore circalittoral communities (JNCC, 2022).

From photographic and PSD data, the 'slightly gravelly sand' sediment type was classified as the JNCC level 4 biotope complex 'Offshore circalittoral sand' (SS.SSa.OSa). Analysis of the infaunal communities did not allow refinement of this habitat. Taxa were dominated by annelids, amphipods and echinoderms, including *Spiophanes bombyx*, *Centroloecetes kroyeranus* and *Echinocyamus pusillus*, which is consistent with this biotope description. Epibenthic fauna associated with sands observed during photographic analysis in the current survey included starfish (*A. rubens*, *Luidia sarsii*, *Luidia ciliaris* and

Astropecten irregularis), hermit crabs (Paguroidea), crabs (*Cancer pagurus* and *Liocarcinus* sp.), shrimp (Caridea), cephalopods (Cephalopoda including Loliginidae and *Sepiola* sp.) and rays (Rajiformes including *Raja clavata*).

'Offshore circalittoral coarse sediment' (SS.SCS.OCS) and 'Echinoderms and crustose communities' (CR.MCR.EcCr) were present as a habitat mosaic along one section of transect MCW-D-ST73, with the sandy sediments overlying coarser material. From photographic data, it was apparent that the seafloor in the survey area comprised gravelly sand with cobbles and boulders visible in some places. The seafloor was classified as 'Offshore circalittoral coarse sediment' where minimal cobbles and boulders were recorded. From faunal composition and photographic data, where the number of cobbles and boulders were elevated, the seafloor has been classified as a 'Echinoderms and crustose communities'. It should be noted that this habitat assessment is based solely on observations of the surface of the seafloor and the physical data acquired in a 15 cm grab sample. The grab will inherently successfully sample softer sediments; therefore, it is considered that the PSD data is not fully representative of the survey area. No PSD data was available for the areas of coarser sediment containing cobbles and boulders that cannot be sampled.

EMODnet indicated that 'Offshore circalittoral sand' (SS.SSa.OSa) was likely to be the dominant habitat within in the survey area, with areas of 'Offshore circalittoral coarse sediment' (SS.SCS.OCS) and 'Moderate energy circalittoral rock' (CR.MCR) also present (EMODnet, 2023). The predicted sediment types largely support what was observed within the current survey. The shallower designations were not considered applicable to the sand and coarse sediments in the current survey area, due to the minimum depth of 44 m LAT.

Due to the cobbles and boulder coverage over extended patches of the MachairWind survey area, there was potential for the Annex I habitat stony reef to occur. Whilst several sections of gravel and cobbles were assessed as 'not a reef', others were assessed as 'low reef' or 'medium reef', often in a mosaic. Due to the nature of the seafloor it was not possible to delineate between low and medium reef. Several sections of gravel and cobbles were assessed as 'not a reef'. These heterogenous areas are a component part of the coarse sediment seafloor type that characterises this region. Irving (2009) and Golding (2020) state that areas of potential stony reef habitat must have an area of more than 25 m² to be classified as reef. The JNCC guidelines for identifying stony reef (Irving, 2009) state that "*when determining whether an area of seafloor should be considered as Annex I stony reef, if a 'low' is scored in any of the characteristics (composition, elevation, extent or biota), then a strong justification would be required for this area to be considered as contributing to the Marine Natura site network of qualifying reefs in terms of the EU Habitats Directive*".

Areas of potential stony reef of more than 25 m² were observed on transects MCW-D-73, MCW-D-82 and MCW-C-ST83 (comprised of a 'low reef' to 'medium reef' mosaic, with a notable area of 'medium reef' on the latter). Therefore, the Annex I habitat 'stony reefs' may be present within the survey area.

The broad habitat 'Subtidal sands and gravels' and the PMF 'Offshore subtidal sands and gravels' are amongst the most common habitats in the UK offshore marine environment (EMODnet, 2023; JNCC, 2014). Based on the sediments, epifauna and habitats observed, these habitats are thought to be present within the survey area.

Adult and juvenile individuals of the ocean quahog, *Arctica islandica*, were recorded in the grab data and the presence of this species was observed at 18 transects during video analysis. The ocean quahog, *A. islandica*, can be found predominately in offshore firm sediments, buried (or part buried) in sand and muddy sand that ranges from fine to coarse grains and to depths of 500 m (Tyler-Walters & Sabatini, 2017). *Arctica islandica* is included in the threatened and/or declining species list for OSPAR Regions II and III and is a PMF low or limited mobility species (JNCC, 2014; OSPAR, 2023).

Gadoid fish (Gadidae) were observed in photographic data, indicating the potential presence of the Atlantic cod *Gadus morhua*. This species is categorised on the IUCN Red list of threatened species as 'Vulnerable' globally, but 'Least Concern' within Europe (IUCN, 2022). It is included on the OSPAR list of threatened and/or declining habitats and species for Regions II and III (OSPAR, 2023). Low intensity nursery grounds for this species overlap the MachairWind survey area (Ellis et al., 2012).

Rays of the family Rajidae were also observed in photographic data, indicating the potential presence of the thornback ray *Raja clavata*, the spotted ray *R. montagui* and the undulate ray *R. undulata*. The presence of the thornback ray was confirmed with an observation at transect MCW-A-ST02. *R. clavata* and *R. montagui* are included on the OSPAR list of threatened and/or declining habitats and species for Regions II and III (OSPAR, 2023), whilst *R. undulata* is a UK BAP priority marine species (JNCC, 2019c). Low intensity *R. montagui* nursery grounds overlap the MachairWind survey area (Ellis et al., 2012). On the IUCN Red list, *R. montagui* is considered endangered, *R. clavata* near threatened and *R. undulata* of least concern (IUCN, 2022).

The species *Ammodytes marinus* was identified in the macrofauna samples. The species is assessed as 'Data Deficient' within Europe on the IUCN red list (IUCN, 2022). The family Ammodytidae was identified during the video analysis and therefore the sand eel *A. tobianus* could also be present. Sand eels are known to prefer sandy habitats where they burrow to escape predators and are threatened by a variety of factors including temperature and disturbance (NatureScot, 2023). Low intensity spawning and nursery grounds overlap the MachairWind survey area (Ellis et al., 2012).

Plaice (*P. platessa*), mackerel (*Scomber scombrus*), whiting (*Merlangius merlangus*) and Atlantic herring (*Clupea harengus*) were observed during video analysis. Low and high intensity nursery grounds and low intensity spawning grounds for these species overlap with the MachairWind survey area (Coull et al., 1998; Ellis et al., 2012). All these UK BAP priority species are considered as 'Least Concern' on the IUCN Red List (IUCN, 2022; JNCC, 2019c).

S. scombrus, *M. merlangus* and *C. harengus* are all PMF species (JNCC, 2014).

No other Annex I habitats or Annex II species, OSPAR threatened and/or declining species and habitats, or UK Priority Habitats and Species and Scottish biodiversity list species and habitats were observed within the survey areas.

4. References

1. Admiralty Marine Data Portal:
<https://datahub.admiralty.co.uk/portal/apps/sites/#/marine-data-portal> [Accessed 13/02/2024]
2. Blott, S. (2010). *GRADISTAT Version 8.0: A grain size distribution and statistics package for the analysis of unconsolidated sediment by sieving or laser granulometer*. Kenneth Pye Associates.
3. British Geological Survey (BGS), 1987. Chart 1:250 000 Series, Forties Sheet, Quaternary Geology.
4. British Geological Survey (BGS) 1994. United Kingdom offshore regional report, The geology of the central North Sea.
5. Brown, A.R. (2011), *Interpretation of three-dimensional seismic data*, seventh edition. Society of Exploration Geophysicists and the American Association of Petroleum Geologists.
6. Buckley, A. F. (2015). A glaciogenic sequence from the Early Pleistocene of the Central North Sea. *Journal of Quaternary Science*, 32(2), 145-168. DOI:10.1002/jqs.2867
7. Coull, K.A., Johnstone, R., & Rogers, S.I. (1998). *Fisheries sensitivity maps in British waters*. United Kingdom Offshore Operators Association [UKOOA].
8. Ellis, J.R., Milligan, S.P., Readdy, L., Taylor, N. & Brown, M.J. (2012). *Spawning and nursery grounds of selected fish species in UK waters*. (Science Series Technical Report No. 127). Centre for Environment, Fisheries and Aquaculture Science [Cefas].
<https://www.cefas.co.uk/publications/techrep/techrep147.pdf>
9. European Environment Agency [EEA]. (2022). *The European Nature Information Service*.
<http://eunis.eea.europa.eu/habitats-code-browser.jsp>
10. European Marine Observation Data Network [EMODnet]. (2023). *Seabed habitats project*.
<http://www.emodnet-seabedhabitats.eu>
11. Folk, R. L. (1954). The distinction between grain size and mineral composition in sedimentary-rock nomenclature. *The Journal of Geology*, 62(4), 344-359.
12. Folk, R. L., & Ward, W. C. (1957). Brazos River bar [Texas]; a study in the significance of grain size parameters. *Journal of Sedimentary Research*, 27(1), 3-26.
<https://doi.org/10.1306/74d70646-2b21-11d7-8648000102c1865d>
13. Fugro (2024). Environmental Field report, MachairWind development, north-west of Islay (Fugro Document No.: F201836-REP-001(2)). Fugro GB Marine Limited.

14. Golding, N., Albrecht, J., & McBreen, F. (2020). *Refining the criteria for defining areas with a 'low resemblance' to Annex I stony reef*. (Joint Nature Conservation Committee [JNCC] Report No. 656). <https://data.jncc.gov.uk/data/4b60f435-727b-4a91-aa85-9c0f99b2c596/JNCC-Report-656-FINAL-WEB.pdf>
15. Hydrosearch Associates Limited, 1993. Study Group Report on Regional Shallow Gas Distribution, Central North Sea. Report No.: 93079.1.
16. International Union for Conservation of Nature [IUCN]. (2022). *The IUCN Red List of Threatened Species*. Version 2022-2. <https://www.iucnredlist.org>
17. Irving, R. (2009). *The identification of the main characteristics of stony reef habitats under the habitats directive: summary report of an inter-agency workshop* (JNCC Report No. 432). Joint Nature Conservation Committee, Peterborough. <https://doi.org/10.13140/2.1.2278.5283>
18. Joint Nature Conservation Committee [JNCC]. (2014). *Priority Marine Features in Scotland's seas*. <https://hub.jncc.gov.uk/assets/151356a8-06cc-43fc-b724-c8212089a2da>
19. Joint Nature Conservation Committee [JNCC] (2015). SACFOR abundance scale used for both littoral and sublittoral taxa from 1990 onwards. <http://archive.jncc.gov.uk/default.aspx?page=2684>
20. Joint Nature Conservation Committee [JNCC]. (2018). Marine habitat correlation tables version 201801 – spreadsheet version 2018. <https://hub.jncc.gov.uk/assets/62a16757-e0d1-4a29-a98e-948745804aec>
21. Joint Nature Conservation Committee [JNCC]. (2019a). *Annex I habitats list*. <https://sac.jncc.gov.uk/habitat/>
22. Joint Nature Conservation Committee [JNCC]. (2019b). *Annex II species list*. <https://sac.jncc.gov.uk/species/>
23. Joint Nature Conservation Committee [JNCC] (2019c). *UK BAP priority species*. <https://jncc.gov.uk/our-work/uk-bap-priority-species/>
24. Joint Nature Conservation Committee [JNCC] (2019d). *UK BAP priority habitats*. <https://jncc.gov.uk/our-work/uk-bap-priority-habitats/>
25. Joint Nature Conservation Committee [JNCC]. (2022). *The marine habitat classification for Britain and Ireland version 22.04*. <https://mhc.jncc.gov.uk/>
26. Kaskela, A. M., Kotilainen, A. T., Alanen, U., Cooper, R., Green, S., Guinan, J., van Heteren, S., Kihlman, S., Van Lancker, V., & Stevenson, A. (2019). Picking up the pieces—harmonising and collating seabed substrate data for European maritime areas. *Geosciences*, 9(2), 84.

27. Lamb, M. R., Harding, R., Huuse, M., Stewart, M., & Brocklehurst, H. S. (2017). The Early Quaternary North Sea Basin. *Journal of the Geological Society*, 175, 275-290.
28. Lamb, M. R., Huuse, M., & Stewart, M. (2016). Early Quaternary sedimentary processes and palaeoenvironments in the central North Sea. *Journal of the Geological Society*, 32(2) 127-144.
29. Long, D. (2006). *BGS Detailed explanation of seabed sediment modified Folk classification*. MESH (Mapping European Seabed Habitats).
https://www.researchgate.net/publication/284511408_BGS_detailed_explanation_of_seabed_sediment_modified_folk_classification.
30. NatureScot (2020). *Scottish biodiversity list*. <https://www.nature.scot/scottish-biodiversity-list>
31. NatureScot (2023). *Sandeels*. <https://www.nature.scot/plants-animals-and-fungi/fish/sea-fish/sandeel>
32. Oslo and Paris Commission [OSPAR]. (2008). *OSPAR List of Threatened and/or Declining Species and Habitats*. Reference Number 2008-06. OSPAR Commission.
33. Oslo and Paris Commission [OSPAR]. (2023). *OSPAR List of threatened and/or declining species and habitats*. <https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats>
34. Parry, M.E.V. (2019). *Guidance on Assigning Benthic Biotopes using EUNIS or the Marine Habitat Classification of Britain and Ireland (Revised 2019)*, JNCC Report No. 546, JNCC, Peterborough, ISSN 0963-8091.
35. Shell Exploration (U.K.) Limited, 1984. Completion and mud logs, 21/30-12.
36. Shell Exploration (U.K.) Limited, 1990. End of well report, completion and mud logs, 21/30-16.
37. Tyler-Walters, H., & Sabatini, M. (31/01/2017). *Arctica islandica Icelandic cyprine*. In Tyler-Walters H. Marine Life Information Network: Biology and Sensitivity Key Information Reviews, [on-line]. Marine Biological Association of the United Kingdom.
<https://www.marlin.ac.uk/species/detail/1519>
38. Wentworth, C. K. (1922). A scale of grade and class terms for clastic sediments. *The journal of geology*, 30(5), 377-392.

Appendix A

Guidelines on Use of Report

Guidelines on Use of Report

This report (the "Report") was prepared as part of the services (the "Services") provided by Fugro GB (North) Marine Limited ("Fugro") for its client (the "Client") under terms of the relevant contract between the two parties (the "Contract"). The Services were performed by Fugro based on requirements of the Client set out in the Contract or otherwise made known by the Client to Fugro at the time.

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Appendix B

Survey Strategy

B.1 Environmental Survey Strategy

B.1.1 Proposed Sampling Stations

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting	Northing	Rationale	Data and Sample Acquisition
Block A				
MCW-A-ST01	641 137.9	6 225 410.2	Client predefined	Video, stills, PSD, FA
MCW-A-ST02	643 878.0	6 225 536.8	Client predefined	Video, stills, PC, FA, eDNA
MCW-A-ST03	646 757.3	6 225 342.1	Client predefined	Video, stills, PSD, FA
MCW-A-ST05	638 497.8	6 222 980.4	Client predefined	Video, stills, PC, eDNA
MCW-A-ST07A	643 915.1	6 223 028.5	Investigate area of high SSS reflectivity	Video, stills, PSD, FA
MCW-A-ST08A	645 652.5	6 221 830.4	Relocated from original position on a rocky island to investigate area of changeable seafloor with sediment ripples	Video, stills, PC, FA, eDNA
MCW-A-ST12	636 003.8	6 220 235.0	Client predefined	Video, stills, PC, eDNA
MCW-A-ST14	640 980.1	6 220 494.4	Client predefined	Video, stills, PC, eDNA
MCW-A-ST22	630 628.1	6 217 682.3	Client predefined	Video, stills, PC, eDNA
MCW-A-ST34	633 107.6	6 215 194.0	Client predefined	Video, stills, PC, eDNA
MCW-A-ST36	638 870.0	6 214 807.6	Client predefined	Video, stills, PC, eDNA
MCW-A-ST44A	630 608.2	6 212 696.0	Investigate area of high SSS reflectivity and potential sediment ripples	Video, stills, PSD, FA
MCW-A-ST55	633 395.3	6 209 745.9	Client predefined	Video, stills, PC, eDNA
Block B				
MCW-B-ST09A	650 065.9	6 222 892.3	Client predefined	Video, stills, PSD, FA
MCW-B-ST10	652 120.3	6 222 662.4	Client predefined	Video, stills, PSD, FA
MCW-B-ST17A	649 155.4	6 220 174.6	Client predefined	Video, stills, PSD, FA
MCW-B-ST18A	651 370.4	6 220 727.7	Client predefined. Transect extended to investigate patch of high SSS reflectivity	Video, stills, PC, FA, eDNA
MCW-B-ST19A	654 912.3	6 219 783.6	Client predefined	Video, stills, PSD, FA
MCW-B-ST28	646 339.9	6 217 812.1	Client predefined	Video, stills, PC, eDNA
MCW-B-ST29A	649 544.8	6 217 237.8	Client predefined	Video, stills, PSD, FA
MCW-B-ST30A	652 141.6	6 217 458.6	Client predefined	Video, stills, PC, FA, eDNA
MCW-B-ST38A	644 136.5	6 214 657.6	Client predefined	Video, stills, PC, eDNA
MCW-B-ST57	638 388.4	6 209 834.5	Client predefined	Video, stills, PC, eDNA
MCW-B-ST59A	643 471.4	6 210 183.5	Client predefined	Video, stills, PC, eDNA

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting	Northing	Rationale	Data and Sample Acquisition
Block C				
MCW-C-ST20	657 485.3	6 219 984.4	Client predefined	Video, stills, PSD, FA
MCW-C-ST31	654 519.6	6 217 495.9	Client predefined	Video, stills, PSD, FA
MCW-C-ST32	657 080.4	6 217 686.5	Client predefined	Video, stills, PSD, FA
MCW-C-ST41	651 703.6	6 215 133.0	Client predefined	Video, stills, PSD, FA
MCW-C-ST42	654 589.7	6 214 943.9	Client predefined	Video, stills, PC, FA, eDNA
MCW-C-ST43	657 107.2	6 215 098.2	Client predefined	Video, stills, PSD, FA
MCW-C-ST51	649 221.2	6 212 397.3	Client predefined	Video, stills, PC, eDNA
MCW-C-ST52	651 625.9	6 212 457.0	Client predefined	Video, stills, PSD, FA
MCW-C-ST53	654 502.8	6 212 260.2	Client predefined	Video, stills, PSD, FA
MCW-C-ST54	657 296.2	6 212 376.3	Client predefined	Video, stills, PSD, FA
MCW-C-ST62	651 805.5	6 209 585.5	Client predefined	Video, stills, PSD, FA
MCW-C-ST63	654 497.1	6 209 644.6	Client predefined	Video, stills, PC, FA, eDNA
MCW-C-ST70	649 517.0	6 206 771.2	Client predefined	Video, stills, PC, FA, eDNA
MCW-C-ST71	651 606.3	6 207 218.9	Client predefined	Video, stills, PSD, FA
MCW-C-ST75	638 721.0	6 204 239.3	Client predefined	Video, stills, PC, eDNA
MCW-C-ST77	644 143.5	6 204 220.4	Client predefined	Video, stills, PC, eDNA
MCW-C-ST79	649 114.1	6 204 475.0	Client predefined	Video, stills, PSD, FA
MCW-C-ST83	638 764.7	6 201 665.2	Client predefined	Video, stills, PSD, FA
MCW-C-ST91	638 680.2	6 198 983.5	Client predefined	Video, stills, PSD, FA
MCW-C-ST92	641 244.2	6 199 176.8	Client predefined	Video, stills, PC, eDNA
Block D				
MCW-D-ST64	656 984.8	6 209 773.9	Client predefined	Video, stills, PSD, FA
MCW-D-ST72A	654 833.7	6 206 663.5	The proposed grab location was on rocky reef. Grab location moved 61.5 m WNW.	Video, stills, PSD, FA
MCW-D-ST73	657 373.9	6 206 836.9	Client predefined	Video, stills, PSD, FA
MCW-D-ST80	651 997.4	6 204 283.6	Client predefined	Video, stills, PC, FA, eDNA
MCW-D-ST81	654 411.2	6 204 350.8	Client predefined	Video, stills, PSD, FA
MCW-D-ST82	656 969.8	6 204 539.7	Client predefined	Video, stills, PC, FA, eDNA
MCW-D-ST86A	647 336.7	6 201 678.2	Client predefined	Video, stills, PC, eDNA
MCW-D-ST88A	651 542.8	6 201 944.0	Client predefined	Video, stills, PSD, FA

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting	Northing	Rationale	Data and Sample Acquisition
MCW-D-ST89A	654 093.0	6 202 125.7	Client predefined	Video, stills, PSD, FA
MCW-D-ST90	657 236.5	6 201 500.0	Client predefined	Video, stills, PSD, FA
MCW-D-ST95A	649 709.0	6 198 447.1	Client predefined	Video, stills, PC, eDNA
MCW-D-ST96	651 988.0	6 199 054.1	Client predefined	Video, stills, PSD, FA
MCW-D-ST97	654 374.1	6 199 098.2	Client predefined	Video, stills, PC, FA, eDNA
MCW-D-ST100A	6 45921.0	6 197 226.7	Client predefined	Video, stills, PC, FA, eDNA
MCW-D-ST101	649 576.3	6 196 377.7	Client predefined	Video, stills, PSD, FA
MCW-D-ST103A	641 665.6	6 193 656.0	Client predefined	Video, stills, PSD, FA
MCW-D-ST104	643 738.1	6 193 436.9	Client predefined	Video, stills, PC, eDNA
MCW-D-ST108A	646 225.7	6 191 608.1	Client predefined	Video, stills, PC, eDNA
Notes PC = Physico-chemical sample PSD = Particle size distribution FA = Faunal sample A eDNA = Environmental deoxyribonucleic acid				

B.2 Completed Environmental Survey

B.2.1 Completed Transects

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W					
Station		Easting	Northing	Depth [m LAT]	Data Acquisition
Block A					
MCW-A-ST01	SOL	641 119.4	6 225 432.5	62	Video: 9 min 3 sec 12 stills
	EOL	641 155.2	6 225 389.7		
MCW-A-ST02	SOL	643 864.3	6 225 561.9	68	Video: 11 min 50 sec 13 stills
	EOL	643 890.9	6 225 512.1		
MCW-A-ST03	SOL	646 751.3	6 225 373.8	74	Video: 9 min 44 sec 12 stills
	EOL	646 762.3	6 225 315.3		
MCW-A-ST05	SOL	638 498.5	6 223 011.6	63	Video: 9 min 17 sec 12 stills
	EOL	638 495.0	6 222 954.4		
MCW-A-ST07A	SOL	643 944.7	6 223 040.9	65	Video: 9 min 31 sec 12 stills
	EOL	643 890.8	6 223 017.0		
MCW-A-ST08A	SOL	645 659.6	6 221 867.9	59	Video: 10 min 27 sec 17 stills
	EOL	645 647.1	6 221 804.1		
MCW-A-ST12	SOL	636 002.8	6 220 270.2	66	Video: 10 min 41 sec 12 stills
	EOL	636 004.7	6 220 207.0		

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W					
Station		Easting	Northing	Depth [m LAT]	Data Acquisition
MCW-A-ST14	SOL	640 982.6	6 220 520.5	52	Video: 8 min 29 sec 12 stills
	EOL	640 976.4	6 220 468.1		
MCW-A-ST22	SOL	630 633.6	6 217 717.7	75	Video: 9 min 54 sec 13 stills
	EOL	630 622.6	6 217 656.5		
MCW-A-ST34	SOL	633 130.5	6 215 215.3	65	Video: 9 min 25 sec 13 stills
	EOL	633 087.9	6 215 176.2		
MCW-A-ST36	SOL	638 876.7	6 214 834.4	50	Video: 8 min 48 sec 12 still
	EOL	638 863.0	6 214 781.7		
MCW-A-ST44A	SOL	630 639.4	6 212 685.9	58	Video: 9 min 24 sec 14 stills
	EOL	630 583.6	6 212 704.5		
MCW-A-ST55	SOL	633 382.5	6 209 770.4	50	Video: 8 min 41 sec 12 stills
	EOL	633 406.1	6 209 723.0		
Block B					
MCW-B-ST09A	SOL	650 116.9	6 222 911.4	104	Video: 19 min 26 sec 16 stills
	EOL	650 013.4	6 222 871.7		
MCW-B-ST10	SOL	652 151.9	6 222 703.7	51	Video: 18 min 6 sec 12 stills
	EOL	652 088.1	6 222 619.8		
MCW-B-ST17A	SOL	649 187.5	6 220 216.9	58	Video: 17 min 59 sec 10 stills
	EOL	649 122.9	6 220 136.9		
MCW-B-ST18A	SOL	651 412.7	6 220 771.5	52	Video: 20 min 12 sec 16 stills
	EOL	651 335.2	6 220 687.3		
MCW-B-ST19A	SOL	654 910.7	6 219 719.9	51	Video: 18 min 36 sec 24 stills
	EOL	654 911.1	6 219 834.7		
MCW-B-ST28	SOL	646 381.0	6 217 841.8	62	Video: 16 min 34 sec 20 stills
	EOL	646 298.3	6 217 783.8		
MCW-B-ST29A	SOL	649 612.7	6 217 240.5	60	Video: 19 min 13 sec 22 stills
	EOL	649 492.7	6 217 236.7		
MCW-B-ST30A	SOL	652 172.8	6 217 411.6	51	Video: 17 min 32 sec 18 stills
	EOL	652 112.3	6 217 501.2		
MCW-B-ST38A	SOL	644 192.7	6 214 646.5	60	Video: 17 min 32 sec 25 stills
	EOL	644 087.4	6 214 668.1		
MCW-B-ST57	SOL	638 413.9	6 209 784.4	56	Video: 18 min 36 sec 19 stills
	EOL	638 363.8	6 209 881.8		

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W					
Station		Easting	Northing	Depth [m LAT]	Data Acquisition
MCW-B-ST59A	SOL	643 527.5	6 210 197.0	63	Video: 19 min 4 sec 15 stills
	EOL	643 420.9	6 210 170.9		
Block C					
MCW-C-ST20	SOL	657 510.6	6 219 953.3	45	Video: 10 min 54 sec 10 stills
	EOL	657 467.8	6 220 004.3		
MCW-C-ST31	SOL	654 524.3	6 217 459.7	47	Video: 10 min 25 sec 10 stills
	EOL	654 515.2	6 217 522.2		
MCW-C-ST32	SOL	657 077.1	6 217 652.2	45	Video: 9 min 52 sec 10 stills
	EOL	657 082.6	6 217 712.8		
MCW-C-ST41	SOL	651 608.4	6 215 065.1	55	Video: 23 min 30 sec 30 stills
	EOL	651 726.4	6 215 148.6		
MCW-C-ST42	SOL	654 566.4	6 214 919.7	46	Video: 9 min 41 sec 13 stills
	EOL	654 608.3	6 214 962.6		
MCW-C-ST43	SOL	657 099.3	6 215 065.0	46	Video: 9 min 40 sec 10 stills
	EOL	657 112.6	6 215 123.1		
MCW-C-ST51	SOL	649 241.5	6 212 426.7	55	Video: 9 min 48 sec 13 stills
	EOL	649 206.3	6 212 376.1		
MCW-C-ST52	SOL	651 655.8	6 212 473.5	50	Video: 9 min 44 sec 13 stills
	EOL	651 603.0	6 212 443.9		
MCW-C-ST53	SOL	654 496.3	6 212 296.1	50	Video: 10 min 22 sec 13 stills
	EOL	654 508.1	6 212 233.2		
MCW-C-ST54	SOL	657 295.1	6 212 408.4	52	Video: 9 min 26 sec 13 stills
	EOL	657 296.1	6 212 350.3		
MCW-C-ST62	SOL	651 792.6	6 209 616.5	50	Video: 12 min 53 sec 15 stills
	EOL	651 816.2	6 209 560.7		
MCW-C-ST63	SOL	654 466.3	6 209 648.3	50	Video: 10 min 08 sec 12 stills
	EOL	654 523.4	6 209 640.7		
MCW-C-ST70	SOL	649 490.5	6 206 785.2	52	Video: 10 min 32 sec 12 stills
	EOL	649 541.9	6 206 757.4		
MCW-C-ST71	SOL	651 617.5	6 207 254.8	52	Video: 11 min 24 sec 13 stills
	EOL	651 599.1	6 207 192.7		
MCW-C-ST75	SOL	638 731.3	6 204 211.0	55	Video: 9 min 5 sec 13 stills
	EOL	638 707.4	6 204 262.7		
MCW-C-ST77	SOL	644 161.2	6 204 242.0	65	Video: 8 min 58 sec 14 stills
	EOL	644 126.3	6 204 198.7		
MCW-C-ST79	SOL	649 121.6	6 204 505.9	53	Video: 9 min 21 sec 13 stills
	EOL	649 108.1	6 204 449.1		
MCW-C-ST83	SOL	638 745.9	6 201 691.6	48	Video: 9 min 27 sec 19 stills
	EOL	638 780.5	6 201 642.1		

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W					
Station		Easting	Northing	Depth [m LAT]	Data Acquisition
MCW-C-ST91	SOL	638 656.9	6 199 012.8	49	Video: 12 min 6 sec 17 stills
	EOL	638 699.7	6 198 961.7		
MCW-C-ST92	SOL	641 227.4	6 199 153.9	55	Video: 8 min 49 sec 11 stills
	EOL	641 258.7	6 199 198.1		
Block D					
MCW-D-ST64	SOL	656 999.0	6 209 828.9	55	Video: 17 min 49 sec 22 stills
	EOL	656 970.7	6 209 723.5		
MCW-D-ST72A	SOL	654 858.7	6 206 718.0	56	Video: 18 min 56 sec 12 stills
	EOL	654 836.8	6 206 665.3		
MCW-D-ST73	SOL	657 309.5	6 206 853.3	59	Video: 21 min 23 sec 39 stills
	EOL	657 437.2	6 206 822.1		
MCW-D-ST80	SOL	651 951.8	6 204 318.1	55	Video: 19 min 6 sec 14 stills
	EOL	651 997.1	6 204 284.6		
MCW-D-ST81	SOL	654 425.3	6 204 405.4	59	Video: 18 min 53 sec 10 stills
	EOL	654 400.9	6 204 296.4		
MCW-D-ST82	SOL	656 829.8	6 204 546.1	57	Video: 33 min 42 sec 34 stills
	EOL	657 023.8	6 204 536.5		
MCW-D-ST86A	SOL	647 290.7	6 201 713.3	53	Video: 19 min 28 sec 10 stills
	EOL	647 380.9	6 201 645.6		
MCW-D-ST88A	SOL	651 487.3	6 201 953.0	58	Video: 18 min 50 sec 12 stills
	EOL	651 595.3	6 201 934.8		
MCW-D-ST89A	SOL	654 049.1	6 202 156.0	58	Video: 18 min 17 sec 8 stills
	EOL	654 137.3	6 202 095.1		
MCW-D-ST95A	SOL	649 710.1	6 198 504.1	52	Video: 18 min 3 sec 17 stills
	EOL	649 709.9	6 198 396.1		
MCW-D-ST100A	SOL	645 937.3	6 197 289.8	59	Video: 20 min 28 sec 10 stills
	EOL	645 907.9	6 197 174.1		
MCW-D-ST101	SOL	649 522.9	6 196 386.5	58	Video: 17 min 18 sec 18 stills
	EOL	649 628.7	6 196 367.7		
MCW-D-ST103A	SOL	641 624.2	6 193 696.8	62	Video: 20 min 20 sec 8 stills
	EOL	641 705.5	6 193 616.9		
MCW-D-ST104	SOL	643 705.4	6 193 486.8	60	Video: 19 min 6 sec 13 stills
	EOL	643 769.5	6 193 392.5		
MCW-D-ST108A	SOL	646 195.7	6 191 655.2	49	Video: 17 min 18 sec 21 stills
	EOL	646 252.3	6 191 564.2		
<p>Notes</p> <p>LAT = Lowest Astronomical Tide</p> <p>SOL = Start of line</p> <p>EOL = End of line</p> <p>Station names with the suffix 'A' were moved from original client defined positions</p>					

B.2.2 Completed Sampling Stations

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting*	Northing*	Depth [m LAT]	Sample Acquisition
Block A				
MCW-A-ST01	641 139.0	6 225 411.7	62	PSD, FA
MCW-A-ST02	643 880.2	6 225 537.1	68	PC, FA, eDNA
MCW-A-ST03	646 759.0	6 225 343.8	73	PSD, FA
MCW-A-ST05	638 499.7	6 222 981.9	63	PC, eDNA
MCW-A-ST07A	643 890.8	6 223 017.0	65	PSD, FA
MCW-A-ST08A	645 653.2	6 221 828.2	59	PC, FA, eDNA
MCW-A-ST12	636 006.1	6 220 237.5	66	PC, eDNA
MCW-A-ST14	640 981.5	6 220 495.1	52	PC, eDNA
MCW-A-ST22	630 630.8	6 217 682.8	75	PC, eDNA
MCW-A-ST34	633 109.1	6 215 193.0	65	PC, eDNA
MCW-A-ST36	638 870.6	6 214 808.8	50	PC, eDNA
MCW-A-ST44A	630 608.9	6 212 694.8	60	PSD, FA
MCW-A-ST55	633 395.4	6 209 746.4	57	PC, eDNA
Block B				
MCW-B-ST09A	650 065.7	6 222 890.7	106	PSD, FA
MCW-B-ST10	652 119.2	6 222 662.8	52	PSD, FA
MCW-B-ST17A	649 157.7	6 220 178.0	59	PSD, FA
MCW-B-ST18A	651 371.1	6 220 729.2	53	PC, FA, eDNA
MCW-B-ST19A	654 909.3	6 219 783.9	45	PSD, FA
MCW-B-ST28	646 340.4	6 217 812.0	62	PC, eDNA
MCW-B-ST29A	649 544.1	6 217 237.0	60	PSD, FA
MCW-B-ST30A	652 140.1	6 217 454.2	51	PC, FA, eDNA
MCW-B-ST38A	644 137.9	6 214 662.2	60	PC, eDNA
MCW-B-ST57	638 385.8	6 209 840.6	56	PC, eDNA
MCW-B-ST59A	643 473.6	6 210 184.4	64	PC, eDNA
Block C				
MCW-C-ST20	657 483.2	6 219 982.5	45	PSD, FA
MCW-C-ST31	654 517.2	6 217 494.8	47	PSD, FA
MCW-C-ST32	657 077.5	6 217 685.0	44	PSD, FA
MCW-C-ST41	651 701.2	6 215 129.6	55	PSD, FA

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting*	Northing*	Depth [m LAT]	Sample Acquisition
MCW-C-ST42	654 587.5	6 214 945.8	45	PC, FA, eDNA
MCW-C-ST43	657 103.5	6 215 097.9	46	PSD, FA
MCW-C-ST51	649 223.7	6 212 398.7	55	PC, eDNA
MCW-C-ST52	651 627.6	6 212 456.4	50	PSD, FA
MCW-C-ST53	654 503.4	6 212 260.1	50	PSD, FA
MCW-C-ST54	657 295.3	6 212 375.4	52	PSD, FA
MCW-C-ST62	651 810.4	6 209 592.5	50	PSD, FA
MCW-C-ST63	654 498.0	6 209 647.3	50	PC, FA, eDNA
MCW-C-ST70	649 517.7	6 206 767.9	52	PC, FA, eDNA
MCW-C-ST71	651 609.3	6 207 220.0	52	PSD, FA
MCW-C-ST75	638 718.2	6 204 233.2	55	PC, eDNA
MCW-C-ST77	644 145.1	6 204 220.9	65	PC, eDNA
MCW-C-ST79	649 117.1	6 204 475.3	53	PSD, FA
MCW_C-ST91	638 689.7	6198 979.8	49	PSD
MCW-C-ST92	641 242.6	6 199 177.8	55	PC, eDNA
Block D				
MCW-D-ST64	656 987.4	6 209 777.4	55	PSD, FA
MCW-D-ST72A	654 836.2	6 206 664.3	56	PSD, FA
MCW-D-ST73	657 312.4	6 206 854.1	57	PSD, FA
MCW-D-ST80	651 998.0	6 204 285.9	55	PC, FA, eDNA
MCW-D-ST81	654 413.7	6 204 349.9	59	PSD, FA
MCW-D-ST82	656 969.4	6 204 544.5	57	PC, FA, eDNA
MCW-D-ST86A	647 338.8	6 201 682.3	53	PC, eDNA
MCW-D-ST88A	651 542.2	6 201 946.3	58	PSD, FA
MCW-D-ST89A	654 093.6	6 202 127.7	58	PSD, FA
MCW-D-ST95A	649 709.0	6 198 447.1	52	PC, eDNA
MCW-D-ST100A	645 921.9	6 197 226.4	60	PC, FA, eDNA
MCW-D-ST101	649 575.3	6 196 376.7	58	PSD, FA
MCW-D-ST103A	641 665.7	6 193 658.6	62	PSD, FA
MCW-D-ST104	643 738.4	6 193 432.4	60	PC, eDNA
MCW-D-ST108A	646 226.1	6 191 608.6	49	PC, eDNA

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W				
Station	Easting*	Northing*	Depth [m LAT]	Sample Acquisition
<p>Notes</p> <p>* = Coordinates presented for the SC or PSD grab sample</p> <p>LAT = Lowest Astronomical Tide</p> <p>PC = Physic-chemical</p> <p>FA = Faunal sample</p> <p>PSD = Particle size distribution</p> <p>eDNA = Environmental DNA</p>				

Appendix C

Environmental Logs

C.1 Survey Log

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
07/09/2023	12:07:11	MCW-A-ST02	Video	SOL	1	68	643 878.0	6 225 536.8	643 864.3	6 225 561.9	28.6	
07/09/2023	12:07:36	MCW-A-ST02	Still	MCW-A-ST02_01	2	-	643 878.0	6 225 536.8	643 864.8	6 225 560.7	27.2	
07/09/2023	12:08:03	MCW-A-ST02	Still	MCW-A-ST02_02	3	-	643 878.0	6 225 536.8	643 865.2	6 225 559.4	25.9	
07/09/2023	12:08:36	MCW-A-ST02	Still	MCW-A-ST02_03	4	-	643 878.0	6 225 536.8	643 866.1	6 225 557.9	24.2	
07/09/2023	12:10:47	MCW-A-ST02	Still	MCW-A-ST02_04	5	-	643 878.0	6 225 536.8	643 869.5	6 225 552.3	17.6	
07/09/2023	12:11:47	MCW-A-ST02	Still	MCW-A-ST02_05	6	-	643 878.0	6 225 536.8	643 870.6	6 225 549.5	14.7	
07/09/2023	12:12:23	MCW-A-ST02	Still	MCW-A-ST02_06	7	-	643 878.0	6 225 536.8	643 871.3	6 225 548.2	13.2	
07/09/2023	12:12:24	MCW-A-ST02	Still	MCW-A-ST02_07	8	-	643 878.0	6 225 536.8	643 871.4	6 225 548.1	13.0	
07/09/2023	12:13:30	MCW-A-ST02	Still	MCW-A-ST02_08	9	-	643 878.0	6 225 536.8	643 874.1	6 225 542.7	7.1	
07/09/2023	12:14:34	MCW-A-ST02	Still	MCW-A-ST02_09	10	-	643 878.0	6 225 536.8	643 877.0	6 225 535.8	1.4	
07/09/2023	12:15:47	MCW-A-ST02	Still	MCW-A-ST02_10	11	-	643 878.0	6 225 536.8	643 881.7	6 225 530.0	7.8	
07/09/2023	12:16:49	MCW-A-ST02	Still	MCW-A-ST02_11	12	-	643 878.0	6 225 536.8	643 884.1	6 225 524.0	14.2	
07/09/2023	12:17:35	MCW-A-ST02	Still	MCW-A-ST02_12	13	-	643 878.0	6 225 536.8	643 885.6	6 225 519.8	18.6	
07/09/2023	12:18:15	MCW-A-ST02	Still	MCW-A-ST02_13	14	-	643 878.0	6 225 536.8	643 888.6	6 225 516.4	23.0	
07/09/2023	12:19:01	MCW-A-ST02	Video	EOL	15	-	643 878.0	6 225 536.8	643 890.9	6 225 512.1	27.9	
07/09/2023	12:47:12	MCW-A-ST02	WS	NS	16	62	643 878.0	6 225 536.8	643 877.9	6 225 537.7	0.8	
07/09/2023	12:58:06	MCW-A-ST02	WS	BOT	17	62	643 878.0	6 225 536.8	643 878.7	6 225 537.1	0.7	
07/09/2023	13:05:50	MCW-A-ST02	WS	TOP	18	2.4	643 878.0	6 225 536.8	643 878.1	6 225 537.8	1.0	
07/09/2023	13:20:36	MCW-A-ST02	DVV	NS/NS	19	68	643 878.0	6 225 536.8	643 879.6	6 225 537.7	1.8	
07/09/2023	13:27:59	MCW-A-ST02	DVV	PC/FA	20	68	643 878.0	6 225 536.8	643 880.2	6 225 537.1	2.3	
07/09/2023	14:29:05	MCW-A-ST01	Video	SOL	21	63	641 137.9	6 225 410.2	641 119.4	6 225 432.5	29.0	
07/09/2023	14:29:24	MCW-A-ST01	Still	MCW-A-ST01_01	22	-	641 137.9	6 225 410.2	641 120.7	6 225 430.9	26.9	
07/09/2023	14:30:13	MCW-A-ST01	Still	MCW-A-ST01_02	23	-	641 137.9	6 225 410.2	641 123.3	6 225 428.0	23.1	
07/09/2023	14:30:50	MCW-A-ST01	Still	MCW-A-ST01_03	24	-	641 137.9	6 225 410.2	641 126.2	6 225 424.7	18.7	
07/09/2023	14:31:26	MCW-A-ST01	Still	MCW-A-ST01_04	25	-	641 137.9	6 225 410.2	641 128.7	6 225 421.6	14.7	
07/09/2023	14:31:37	MCW-A-ST01	Still	MCW-A-ST01_05	26	-	641 137.9	6 225 410.2	641 129.3	6 225 420.8	13.7	
07/09/2023	14:32:35	MCW-A-ST01	Still	MCW-A-ST01_06	27	-	641 137.9	6 225 410.2	641 133.1	6 225 416.2	7.7	
07/09/2023	14:33:32	MCW-A-ST01	Still	MCW-A-ST01_07	28	-	641 137.9	6 225 410.2	641 136.8	6 225 411.4	1.6	
07/09/2023	14:34:02	MCW-A-ST01	Still	MCW-A-ST01_08	29	-	641 137.9	6 225 410.2	641 139.0	6 225 408.9	1.6	
07/09/2023	14:34:55	MCW-A-ST01	Still	MCW-A-ST01_09	30	-	641 137.9	6 225 410.2	641 142.1	6 225 404.6	7.0	
07/09/2023	14:35:38	MCW-A-ST01	Still	MCW-A-ST01_10	31	-	641 137.9	6 225 410.2	641 145.1	6 225 401.3	11.4	
07/09/2023	14:36:50	MCW-A-ST01	Still	MCW-A-ST01_11	32	-	641 137.9	6 225 410.2	641 150.0	6 225 396.1	18.5	
07/09/2023	14:37:28	MCW-A-ST01	Still	MCW-A-ST01_12	33	-	641 137.9	6 225 410.2	641 152.7	6 225 393.0	22.6	
07/09/2023	14:38:08	MCW-A-ST01	Video	EOL	34	-	641 137.9	6 225 410.2	641 155.2	6 225 389.7	26.8	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
07/09/2023	15:43:26	MCW-A-ST01	DVV	FA/NS	35	62	641 137.9	6 225 410.2	641 138.7	6 225 411.5	1.5	
07/09/2023	15:53:20	MCW-A-ST01	DVV	PC	36	62	641 137.9	6 225 410.2	641 139.0	6 225 411.7	1.9	
07/09/2023	17:01:25	MCW-A-ST05	Video	SOL	37	63	638 497.8	6 222 980.4	638 498.5	6 223 011.6	31.2	
07/09/2023	17:02:00	MCW-A-ST05	Still	MCW-A-ST05_01	38	-	638 497.8	6 222 980.4	638 498.4	6 223 008.5	28.1	
07/09/2023	17:02:38	MCW-A-ST05	Still	MCW-A-ST05_02	39	-	638 497.8	6 222 980.4	638 497.6	6 223 004.9	24.6	
07/09/2023	17:03:16	MCW-A-ST05	Still	MCW-A-ST05_03	40	-	638 497.8	6 222 980.4	638 497.4	6 223 000.9	20.5	
07/09/2023	17:03:39	MCW-A-ST05	Still	MCW-A-ST05_04	41	-	638 497.8	6 222 980.4	638 497.0	6 222 998.8	18.4	
07/09/2023	17:04:56	MCW-A-ST05	Still	MCW-A-ST05_05	42	-	638 497.8	6 222 980.4	638 496.6	6 222 990.1	9.8	
07/09/2023	17:05:23	MCW-A-ST05	Still	MCW-A-ST05_06	43	-	638 497.8	6 222 980.4	638 496.6	6 222 987.2	6.9	
07/09/2023	17:05:58	MCW-A-ST05	Still	MCW-A-ST05_07	44	-	638 497.8	6 222 980.4	638 496.5	6 222 983.4	3.3	
07/09/2023	17:07:25	MCW-A-ST05	Still	MCW-A-ST05_08	45	-	638 497.8	6 222 980.4	638 495.9	6 222 974.7	6.0	
07/09/2023	17:07:54	MCW-A-ST05	Still	MCW-A-ST05_09	46	-	638 497.8	6 222 980.4	638 495.8	6 222 971.6	9.0	
07/09/2023	17:08:37	MCW-A-ST05	Still	MCW-A-ST05_10	47	-	638 497.8	6 222 980.4	638 496.0	6 222 967.1	13.4	
07/09/2023	17:09:32	MCW-A-ST05	Still	MCW-A-ST05_11	48	-	638 497.8	6 222 980.4	638 495.5	6 222 961.7	18.8	
07/09/2023	17:09:56	MCW-A-ST05	Still	MCW-A-ST05_12	49	-	638 497.8	6 222 980.4	638 495.6	6 222 959.2	21.3	
07/09/2023	17:10:42	MCW-A-ST05	Video	EOL	50	-	638 497.8	6 222 980.4	638 495.0	6 222 954.4	26.1	
07/09/2023	17:26:31	MCW-A-ST05	WS	TOP	51	6	638 497.8	6 222 980.4	638 497.5	6 222 980.8	0.5	
07/09/2023	17:37:14	MCW-A-ST05	WS	BOT	52	58	638 497.8	6 222 980.4	638 497.0	6 222 981.6	1.5	
07/09/2023	17:50:47	MCW-A-ST05	DVV	PC	53	63	638 497.8	6 222 980.4	638 499.7	6 222 981.9	2.4	
07/09/2023	19:37:23	MCW-A-ST12	Video	SOL	54	66	636 003.8	6 220 235.0	636 002.8	6 220 270.2	35.2	
07/09/2023	19:38:00	MCW-A-ST12	Still	MCW-A-ST12_01	55	-	636 003.8	6 220 235.0	636 003.0	6 220 267.8	32.8	
07/09/2023	19:39:10	MCW-A-ST12	Still	MCW-A-ST12_02	56	-	636 003.8	6 220 235.0	636 003.4	6 220 260.3	25.2	
07/09/2023	19:39:25	MCW-A-ST12	Still	MCW-A-ST12_03	57	-	636 003.8	6 220 235.0	636 003.5	6 220 258.6	23.6	
07/09/2023	19:39:49	MCW-A-ST12	Still	MCW-A-ST12_04	58	-	636 003.8	6 220 235.0	636 003.5	6 220 256.3	21.3	
07/09/2023	19:40:05	MCW-A-ST12	Still	MCW-A-ST12_05	59	-	636 003.8	6 220 235.0	636 003.8	6 220 254.9	19.9	
07/09/2023	19:40:51	MCW-A-ST12	Still	MCW-A-ST12_06	60	-	636 003.8	6 220 235.0	636 004.3	6 220 250.5	15.4	
07/09/2023	19:41:10	MCW-A-ST12	Still	MCW-A-ST12_07	61	-	636 003.8	6 220 235.0	636 004.4	6 220 248.2	13.2	
07/09/2023	19:42:06	MCW-A-ST12	Still	MCW-A-ST12_08	62	-	636 003.8	6 220 235.0	636 004.3	6 220 243.2	8.2	
07/09/2023	19:42:30	MCW-A-ST12	Still	MCW-A-ST12_09	63	-	636 003.8	6 220 235.0	636 004.4	6 220 240.3	5.3	
07/09/2023	19:44:11	MCW-A-ST12	Still	MCW-A-ST12_10	64	-	636 003.8	6 220 235.0	636 004.4	6 220 230.5	4.6	
07/09/2023	19:45:48	MCW-A-ST12	Still	MCW-A-ST12_11	65	-	636 003.8	6 220 235.0	636 004.3	6 220 220.7	14.4	
07/09/2023	19:46:32	MCW-A-ST12	Still	MCW-A-ST12_12	66	-	636 003.8	6 220 235.0	636 004.4	6 220 216.1	18.9	
07/09/2023	19:48:04	MCW-A-ST12	Video	EOL	67	-	636 003.8	6 220 235.0	636 004.7	6 220 207.0	28.0	
07/09/2023	20:03:29	MCW-A-ST12	WS	TOP	68	4	636 003.8	6 220 235.0	636 003.8	6 220 235.4	0.4	
07/09/2023	20:10:35	MCW-A-ST12	WS	BOT	69	61	636 003.8	6 220 235.0	636 004.3	6 220 236.6	1.6	
07/09/2023	20:22:49	MCW-A-ST12	DVV	PC	70	66	636 003.8	6 220 235.0	636 006.1	6 220 237.5	3.3	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
07/09/2023	21:42:40	MCW-A-ST22	Video	SOL	72	75	630 628.1	6 217 682.3	630 633.6	6 217 717.7	35.8	
07/09/2023	21:43:17	MCW-A-ST22	Still	MCW-A-ST22_01	73	-	630 628.1	6 217 682.3	630 633.0	6 217 713.9	31.9	
07/09/2023	21:43:37	MCW-A-ST22	Still	MCW-A-ST22_02	74	-	630 628.1	6 217 682.3	630 632.7	6 217 711.7	29.7	
07/09/2023	21:44:03	MCW-A-ST22	Still	MCW-A-ST22_03	75	-	630 628.1	6 217 682.3	630 631.8	6 217 708.4	26.3	
07/09/2023	21:45:59	MCW-A-ST22	Still	MCW-A-ST22_04	76	-	630 628.1	6 217 682.3	630 630.3	6 217 696.8	14.6	
07/09/2023	21:46:16	MCW-A-ST22	Still	MCW-A-ST22_05	77	-	630 628.1	6 217 682.3	630 630.1	6 217 694.8	12.7	
07/09/2023	21:46:47	MCW-A-ST22	Still	MCW-A-ST22_06	78	-	630 628.1	6 217 682.3	630 629.4	6 217 691.7	9.4	
07/09/2023	21:47:40	MCW-A-ST22	Still	MCW-A-ST22_07	79	-	630 628.1	6 217 682.3	630 628.4	6 217 686.2	3.9	
07/09/2023	21:48:28	MCW-A-ST22	Still	MCW-A-ST22_08	80	-	630 628.1	6 217 682.3	630 627.5	6 217 681.5	1.0	
07/09/2023	21:49:22	MCW-A-ST22	Still	MCW-A-ST22_09	81	-	630 628.1	6 217 682.3	630 626.3	6 217 676.4	6.2	
07/09/2023	21:49:59	MCW-A-ST22	Still	MCW-A-ST22_10	82	-	630 628.1	6 217 682.3	630 625.7	6 217 672.4	10.2	
07/09/2023	21:50:29	MCW-A-ST22	Still	MCW-A-ST22_11	83	-	630 628.1	6 217 682.3	630 624.9	6 217 669.3	13.4	
07/09/2023	21:51:49	MCW-A-ST22	Still	MCW-A-ST22_12	84	-	630 628.1	6 217 682.3	630 623.6	6 217 661.3	21.6	
07/09/2023	21:52:16	MCW-A-ST22	Still	MCW-A-ST22_13	85	-	630 628.1	6 217 682.3	630 623.0	6 217 658.4	24.5	
07/09/2023	21:52:34	MCW-A-ST22	Video	EOL	86	-	630 628.1	6 217 682.3	630 622.6	6 217 656.5	26.4	
07/09/2023	22:07:10	MCW-A-ST22	WS	TOP	87	5	630 628.1	6 217 682.3	630 628.1	6 217 682.7	0.3	
07/09/2023	22:13:36	MCW-A-ST22	WS	BOT	88	69	630 628.1	6 217 682.3	630 628.0	6 217 682.7	0.4	
07/09/2023	22:32:01	MCW-A-ST22	DVV	NS/NS	89	75	630 628.1	6 217 682.3	630 630.7	6 217 683.3	2.8	
07/09/2023	22:40:36	MCW-A-ST22	DVV	NS/NS	90	75	630 628.1	6 217 682.3	630 631.1	6 217 683.3	3.2	
07/09/2023	22:49:23	MCW-A-ST22	DVV	NS/NS	91	75	630 628.1	6 217 682.3	630 630.6	6 217 683.6	2.8	
07/09/2023	22:59:10	MCW-A-ST22	DVV	PC	92	75	630 628.1	6 217 682.3	630 630.8	6 217 682.8	2.7	
08/09/2023	00:27:15	MCW-A-ST34	Video	SOL	NF	65	633 107.6	6 215 194.0	633 130.5	6 215 215.3	31.2	
08/09/2023	00:28:18	MCW-A-ST34	Still	MCW-A-ST34_01	93	-	633 107.6	6 215 194.0	633 126.1	6 215 210.8	25.0	
08/09/2023	00:28:59	MCW-A-ST34	Still	MCW-A-ST34_02	94	-	633 107.6	6 215 194.0	633 122.9	6 215 207.9	20.6	
08/09/2023	00:29:27	MCW-A-ST34	Still	MCW-A-ST34_03	95	-	633 107.6	6 215 194.0	633 120.9	6 215 206.0	17.9	
08/09/2023	00:29:47	MCW-A-ST34	Still	MCW-A-ST34_04	96	-	633 107.6	6 215 194.0	633 119.4	6 215 204.8	15.9	
08/09/2023	00:30:38	MCW-A-ST34	Still	MCW-A-ST34_05	97	-	633 107.6	6 215 194.0	633 115.6	6 215 201.5	10.9	
08/09/2023	00:31:13	MCW-A-ST34	Still	MCW-A-ST34_06	98	-	633 107.6	6 215 194.0	633 112.9	6 215 199.1	7.3	
08/09/2023	00:32:11	MCW-A-ST34	Still	MCW-A-ST34_07	99	-	633 107.6	6 215 194.0	633 108.1	6 215 195.1	1.2	
08/09/2023	00:32:54	MCW-A-ST34	Still	MCW-A-ST34_08	100	-	633 107.6	6 215 194.0	633 104.9	6 215 192.1	3.3	
08/09/2023	00:33:38	MCW-A-ST34	Still	MCW-A-ST34_09	101	-	633 107.6	6 215 194.0	633 101.5	6 215 189.2	7.8	
08/09/2023	00:34:40	MCW-A-ST34	Still	MCW-A-ST34_10	102	-	633 107.6	6 215 194.0	633 096.9	6 215 184.5	14.3	
08/09/2023	00:35:12	MCW-A-ST34	Still	MCW-A-ST34_11	103	-	633 107.6	6 215 194.0	633 094.5	6 215 182.3	17.6	
08/09/2023	00:35:54	MCW-A-ST34	Still	MCW-A-ST34_12	104	-	633 107.6	6 215 194.0	633 091.3	6 215 179.6	21.8	
08/09/2023	00:36:25	MCW-A-ST34	Still	MCW-A-ST34_13	105	-	633 107.6	6 215 194.0	633 089.0	6 215 177.2	25.1	
08/09/2023	00:36:40	MCW-A-ST34	Video	EOL	106	-	633 107.6	6 215 194.0	633 087.9	6 215 176.2	26.6	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
08/09/2023	00:57:14	MCW-A-ST34	WS	TOP	107	3	633 107.6	6 215 194.0	633 109.9	6 215 197.5	4.2	
08/09/2023	01:07:10	MCW-A-ST34	WS	BOT	108	58	633 107.6	6 215 194.0	633 109.3	6 215 195.0	1.9	
08/09/2023	01:27:06	MCW-A-ST34	DVV	PC	109	58	633 107.6	6 215 194.0	633 109.1	6 215 193.0	1.8	
08/09/2023	03:08:12	MCW-A-ST44A	Video	SOL	NF	58	630 608.2	6 212 696.0	630 639.4	6 212 685.9	32.8	
08/09/2023	03:08:38	MCW-A-ST44A	Still	MCW-A-ST44A_01	110	-	630 608.2	6 212 696.0	630 637.1	6 212 686.7	30.4	
08/09/2023	03:09:25	MCW-A-ST44A	Still	MCW-A-ST44A_02	111	-	630 608.2	6 212 696.0	630 632.5	6 212 688.2	25.5	
08/09/2023	03:10:11	MCW-A-ST44A	Still	MCW-A-ST44A_03	112	-	630 608.2	6 212 696.0	630 627.5	6 212 689.8	20.3	
08/09/2023	03:10:44	MCW-A-ST44A	Still	MCW-A-ST44A_04	113	-	630 608.2	6 212 696.0	630 624.3	6 212 691.0	16.9	
08/09/2023	03:11:08	MCW-A-ST44A	Still	MCW-A-ST44A_05	114	-	630 608.2	6 212 696.0	630 621.9	6 212 691.8	14.3	
08/09/2023	03:11:31	MCW-A-ST44A	Still	MCW-A-ST44A_06	115	-	630 608.2	6 212 696.0	630 619.5	6 212 692.7	11.8	
08/09/2023	03:12:08	MCW-A-ST44A	Still	MCW-A-ST44A_07	116	-	630 608.2	6 212 696.0	630 615.9	6 212 693.9	8.0	
08/09/2023	03:12:52	MCW-A-ST44A	Still	MCW-A-ST44A_08	117	-	630 608.2	6 212 696.0	630 611.7	6 212 695.2	3.6	
08/09/2023	03:13:35	MCW-A-ST44A	Still	MCW-A-ST44A_09	118	-	630 608.2	6 212 696.0	630 607.4	6 212 696.5	1.0	
08/09/2023	03:14:03	MCW-A-ST44A	Still	MCW-A-ST44A_10	119	-	630 608.2	6 212 696.0	630 604.5	6 212 697.6	4.1	
08/09/2023	03:14:43	MCW-A-ST44A	Still	MCW-A-ST44A_11	120	-	630 608.2	6 212 696.0	630 600.7	6 212 698.8	8.0	
08/09/2023	03:15:27	MCW-A-ST44A	Still	MCW-A-ST44A_12	121	-	630 608.2	6 212 696.0	630 596.3	6 212 700.3	12.7	
08/09/2023	03:16:17	MCW-A-ST44A	Still	MCW-A-ST44A_13	122	-	630 608.2	6 212 696.0	630 591.4	6 212 702.0	17.8	
08/09/2023	03:16:51	MCW-A-ST44A	Still	MCW-A-ST44A_14	123	-	630 608.2	6 212 696.0	630 588.0	6 212 703.1	21.4	
08/09/2023	03:17:36	MCW-A-ST44A	Video	EOL	124	-	630 608.2	6 212 696.0	630 583.6	6 212 704.5	26.0	
08/09/2023	03:37:34	MCW-A-ST44A	DVV	PC/FA	125	-	630 608.2	6 212 696.0	630 608.9	6 212 694.8	1.4	
08/09/2023	04:35:51	MCW-A-ST55	Video	SOL	NF	50	633 395.3	6 209 745.9	633 382.5	6 209 770.4	27.7	
08/09/2023	04:36:04	MCW-A-ST55	Still	MCW-A-ST55_01	126	-	633 395.3	6 209 745.9	633 382.7	6 209 769.1	26.4	
08/09/2023	04:36:31	MCW-A-ST55	Still	MCW-A-ST55_02	127	-	633 395.3	6 209 745.9	633 383.4	6 209 766.7	24.0	
08/09/2023	04:37:22	MCW-A-ST55	Still	MCW-A-ST55_03	128	-	633 395.3	6 209 745.9	633 386.3	6 209 762.3	18.8	
08/09/2023	04:37:40	MCW-A-ST55	Still	MCW-A-ST55_04	129	-	633 395.3	6 209 745.9	633 387.2	6 209 760.7	16.9	
08/09/2023	04:38:24	MCW-A-ST55	Still	MCW-A-ST55_05	130	-	633 395.3	6 209 745.9	633 389.2	6 209 756.5	12.3	
08/09/2023	04:39:22	MCW-A-ST55	Still	MCW-A-ST55_06	131	-	633 395.3	6 209 745.9	633 391.9	6 209 751.3	6.4	
08/09/2023	04:40:17	MCW-A-ST55	Still	MCW-A-ST55_07	132	-	633 395.3	6 209 745.9	633 394.7	6 209 746.6	1.0	
08/09/2023	04:41:14	MCW-A-ST55	Still	MCW-A-ST55_08	133	-	633 395.3	6 209 745.9	633 397.1	6 209 741.4	4.8	
08/09/2023	04:42:07	MCW-A-ST55	Still	MCW-A-ST55_09	134	-	633 395.3	6 209 745.9	633 399.5	6 209 736.5	10.3	
08/09/2023	04:42:43	MCW-A-ST55	Still	MCW-A-ST55_10	135	-	633 395.3	6 209 745.9	633 401.1	6 209 732.9	14.2	
08/09/2023	04:43:26	MCW-A-ST55	Still	MCW-A-ST55_11	136	-	633 395.3	6 209 745.9	633 403.0	6 209 728.8	18.7	
08/09/2023	04:44:00	MCW-A-ST55	Still	MCW-A-ST55_12	137	-	633 395.3	6 209 745.9	633 404.6	6 209 725.6	22.3	
08/09/2023	04:44:32	MCW-A-ST55	Video	EOL	138	-	633 395.3	6 209 745.9	633 406.1	6 209 723.0	25.3	
08/09/2023	05:01:32	MCW-A-ST55	WS	TOP	139	3	633 395.3	6 209 745.9	633 394.1	6 209 747.7	2.2	
08/09/2023	05:11:05	MCW-A-ST55	WS	BOT	140	50	633 395.3	6 209 745.9	633 394.5	6 209 745.3	1.0	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
08/09/2023	05:29:44	MCW-A-ST55	DVV	PC	141	50	633 395.3	6 209 745.9	633 395.4	6 209 746.4	0.5	
08/09/2023	07:04:16	MCW-A-ST36	Video	SOL	NF	50	638 870.0	6 214 807.6	638 876.7	6 214 834.4	27.6	
08/09/2023	07:04:39	MCW-A-ST36	Still	MCW-A-ST36_01	142	-	638 870.0	6 214 807.6	638 876.2	6 214 832.2	25.4	
08/09/2023	07:05:21	MCW-A-ST36	Still	MCW-A-ST36_02	143	-	638 870.0	6 214 807.6	638 875.0	6 214 828.0	20.9	
08/09/2023	07:06:11	MCW-A-ST36	Still	MCW-A-ST36_03	144	-	638 870.0	6 214 807.6	638 873.8	6 214 823.2	16.0	
08/09/2023	07:06:48	MCW-A-ST36	Still	MCW-A-ST36_04	145	-	638 870.0	6 214 807.6	638 872.6	6 214 819.1	11.7	
08/09/2023	07:07:30	MCW-A-ST36	Still	MCW-A-ST36_05	146	-	638 870.0	6 214 807.6	638 871.7	6 214 814.8	7.4	
08/09/2023	07:08:29	MCW-A-ST36	Still	MCW-A-ST36_06	147	-	638 870.0	6 214 807.6	638 870.2	6 214 809.0	1.3	
08/09/2023	07:09:04	MCW-A-ST36	Still	MCW-A-ST36_07	148	-	638 870.0	6 214 807.6	638 869.3	6 214 805.7	2.1	
08/09/2023	07:09:50	MCW-A-ST36	Still	MCW-A-ST36_08	149	-	638 870.0	6 214 807.6	638 868.0	6 214 801.1	6.9	
08/09/2023	07:10:28	MCW-A-ST36	Still	MCW-A-ST36_09	150	-	638 870.0	6 214 807.6	638 867.0	6 214 797.2	10.8	
08/09/2023	07:11:06	MCW-A-ST36	Still	MCW-A-ST36_10	151	-	638 870.0	6 214 807.6	638 865.9	6 214 793.4	14.8	
08/09/2023	07:11:43	MCW-A-ST36	Still	MCW-A-ST36_11	152	-	638 870.0	6 214 807.6	638 865.0	6 214 789.6	18.7	
08/09/2023	07:12:20	MCW-A-ST36	Still	MCW-A-ST36_12	153	-	638 870.0	6 214 807.6	638 864.1	6 214 786.1	22.3	
08/09/2023	07:13:04	MCW-A-ST36	Video	EOL	154	-	638 870.0	6 214 807.6	638 863.0	6 214 781.7	26.9	
08/09/2023	07:32:18	MCW-A-ST36	WS	TOP	155	3	638 870.0	6 214 807.6	638 869.7	6 214 808.1	0.6	5m below sea surface
08/09/2023	07:41:11	MCW-A-ST36	WS	BOT	156	45	638 870.0	6 214 807.6	638 870.1	6 214 809.4	1.8	
08/09/2023	08:07:04	MCW-A-ST36	DVV	PC	157	50	638 870.0	6 214 807.6	638 870.6	6 214 808.8	1.3	
08/09/2023	09:41:23	MCW-A-ST14	Video	SOL	NF	52	640 980.1	6 220 494.4	640 982.6	6 220 520.5	26.2	
08/09/2023	09:41:41	MCW-A-ST14	Still	MCW-A-ST14_01	158	-	640 980.1	6 220 494.4	640 982.3	6 220 518.2	24.0	
08/09/2023	09:42:27	MCW-A-ST14	Still	MCW-A-ST14_02	159	-	640 980.1	6 220 494.4	640 981.8	6 220 513.6	19.3	
08/09/2023	09:42:46	MCW-A-ST14	Still	MCW-A-ST14_03	160	-	640 980.1	6 220 494.4	640 981.5	6 220 511.9	17.6	
08/09/2023	09:43:22	MCW-A-ST14	Still	MCW-A-ST14_04	161	-	640 980.1	6 220 494.4	640 981.3	6 220 508.5	14.1	
08/09/2023	09:44:16	MCW-A-ST14	Still	MCW-A-ST14_05	162	-	640 980.1	6 220 494.4	640 980.2	6 220 502.8	8.4	
08/09/2023	09:44:59	MCW-A-ST14	Still	MCW-A-ST14_06	163	-	640 980.1	6 220 494.4	640 979.7	6 220 498.4	4.0	
08/09/2023	09:45:23	MCW-A-ST14	Still	MCW-A-ST14_07	164	-	640 980.1	6 220 494.4	640 979.4	6 220 495.7	1.5	
08/09/2023	09:46:11	MCW-A-ST14	Still	MCW-A-ST14_08	165	-	640 980.1	6 220 494.4	640 978.6	6 220 490.8	3.8	
08/09/2023	09:46:54	MCW-A-ST14	Still	MCW-A-ST14_09	166	-	640 980.1	6 220 494.4	640 978.3	6 220 485.9	8.7	
08/09/2023	09:47:27	MCW-A-ST14	Still	MCW-A-ST14_10	167	-	640 980.1	6 220 494.4	640 978.0	6 220 482.9	11.7	
08/09/2023	09:48:18	MCW-A-ST14	Still	MCW-A-ST14_11	168	-	640 980.1	6 220 494.4	640 977.3	6 220 477.8	16.8	
08/09/2023	09:48:59	MCW-A-ST14	Still	MCW-A-ST14_12	169	-	640 980.1	6 220 494.4	640 976.9	6 220 473.5	21.1	
08/09/2023	09:49:52	MCW-A-ST14	Video	EOL	170	-	640 980.1	6 220 494.4	640 976.4	6 220 468.1	26.5	
08/09/2023	10:03:45	MCW-A-ST14	WS	TOP	171	3	640 980.1	6 220 494.4	640 980.0	6 220 496.2	1.9	
08/09/2023	10:11:53	MCW-A-ST14	WS	BOT	172	47	640 980.1	6 220 494.4	640 980.0	6 220 498.0	3.6	
08/09/2023	10:35:51	MCW-A-ST14	DVV	PC	173	52	640 980.1	6 220 494.4	640 981.5	6 220 495.1	1.6	
08/09/2023	12:13:54	MCW-A-ST08A	Video	SOL	174	59	645 652.5	6 221 830.4	645 659.6	6 221 867.9	38.2	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
08/09/2023	12:14:17	MCW-A-ST08A	Still	MCW-A-ST08A_01	175	-	645 652.5	6 221 830.4	645 658.9	6 221 865.8	36.0	
08/09/2023	12:14:38	MCW-A-ST08A	Still	MCW-A-ST08A_02	176	-	645 652.5	6 221 830.4	645 658.5	6 221 863.8	33.9	
08/09/2023	12:15:14	MCW-A-ST08A	Still	MCW-A-ST08A_03	177	-	645 652.5	6 221 830.4	645 657.9	6 221 859.8	29.9	
08/09/2023	12:15:43	MCW-A-ST08A	Still	MCW-A-ST08A_04	178	-	645 652.5	6 221 830.4	645 657.2	6 221 856.9	26.9	
08/09/2023	12:16:18	MCW-A-ST08A	Still	MCW-A-ST08A_05	179	-	645 652.5	6 221 830.4	645 656.7	6 221 853.1	23.1	
08/09/2023	12:16:31	MCW-A-ST08A	Still	MCW-A-ST08A_06	180	-	645 652.5	6 221 830.4	645 656.2	6 221 851.9	21.8	
08/09/2023	12:17:00	MCW-A-ST08A	Still	MCW-A-ST08A_07	181	-	645 652.5	6 221 830.4	645 655.8	6 221 848.9	18.8	
08/09/2023	12:17:39	MCW-A-ST08A	Still	MCW-A-ST08A_08	182	-	645 652.5	6 221 830.4	645 655.1	6 221 844.8	14.6	
08/09/2023	12:18:22	MCW-A-ST08A	Still	MCW-A-ST08A_09	183	-	645 652.5	6 221 830.4	645 654.6	6 221 840.8	10.6	
08/09/2023	12:19:13	MCW-A-ST08A	Still	MCW-A-ST08A_10	184	-	645 652.5	6 221 830.4	645 653.6	6 221 835.6	5.3	
08/09/2023	12:20:13	MCW-A-ST08A	Still	MCW-A-ST08A_11	185	-	645 652.5	6 221 830.4	645 652.4	6 221 829.8	0.6	
08/09/2023	12:21:08	MCW-A-ST08A	Still	MCW-A-ST08A_12	186	-	645 652.5	6 221 830.4	645 651.0	6 221 823.8	6.8	
08/09/2023	12:21:31	MCW-A-ST08A	Still	MCW-A-ST08A_13	187	-	645 652.5	6 221 830.4	645 650.3	6 221 821.6	9.1	
08/09/2023	12:22:22	MCW-A-ST08A	Still	MCW-A-ST08A_14	188	-	645 652.5	6 221 830.4	645 649.3	6 221 816.3	14.4	
08/09/2023	12:22:44	MCW-A-ST08A	Still	MCW-A-ST08A_15	189	-	645 652.5	6 221 830.4	645 648.9	6 221 814.1	16.7	
08/09/2023	12:22:54	MCW-A-ST08A	Still	MCW-A-ST08A_16	190	-	645 652.5	6 221 830.4	645 648.8	6 221 812.9	17.8	
08/09/2023	12:23:28	MCW-A-ST08A	Still	MCW-A-ST08A_17	191	-	645 652.5	6 221 830.4	645 648.3	6 221 809.2	21.6	
08/09/2023	12:24:21	MCW-A-ST08A	Video	EOL	192	-	645 652.5	6 221 830.4	645 647.1	6 221 804.1	26.9	
08/09/2023	12:42:13	MCW-A-ST08A	WS	TOP	193	4	645 652.5	6 221 830.4	645 653.0	6 221 831.0	0.8	
08/09/2023	12:48:14	MCW-A-ST08A	WS	BOT	194	55	645 652.5	6 221 830.4	645 653.3	6 221 830.9	0.9	
08/09/2023	13:04:49	MCW-A-ST08A	DVV	PC/NS	195	55	645 652.5	6 221 830.4	645 653.2	6 221 828.2	2.3	
08/09/2023	13:17:52	MCW-A-ST08A	DVV	FA	196	55	645 652.5	6 221 830.4	645 654.4	6 221 826.8	4.1	
08/09/2023	14:12:50	MCW-A-ST07A	Video	SOL	197	65	643 915.1	6 223 028.5	643 944.7	6 223 040.9	32.1	
08/09/2023	14:13:20	MCW-A-ST07A	Still	MCW-A-ST07A_01	198	-	643 915.1	6 223 028.5	643 942.5	6 223 039.6	29.5	
08/09/2023	14:13:56	MCW-A-ST07A	Still	MCW-A-ST07A_02	199	-	643 915.1	6 223 028.5	643 939.1	6 223 037.9	25.8	
08/09/2023	14:14:12	MCW-A-ST07A	Still	MCW-A-ST07A_03	200	-	643 915.1	6 223 028.5	643 937.2	6 223 037.1	23.7	
08/09/2023	14:15:29	MCW-A-ST07A	Still	MCW-A-ST07A_04	201	-	643 915.1	6 223 028.5	643 930.4	6 223 034.0	16.2	
08/09/2023	14:15:42	MCW-A-ST07A	Still	MCW-A-ST07A_05	202	-	643 915.1	6 223 028.5	643 928.8	6 223 033.4	14.5	
08/09/2023	14:16:11	MCW-A-ST07A	Still	MCW-A-ST07A_06	203	-	643 915.1	6 223 028.5	643 925.9	6 223 032.5	11.5	
08/09/2023	14:17:27	MCW-A-ST07A	Still	MCW-A-ST07A_07	204	-	643 915.1	6 223 028.5	643 919.0	6 223 030.0	4.2	
08/09/2023	14:18:47	MCW-A-ST07A	Still	MCW-A-ST07A_08	205	-	643 915.1	6 223 028.5	643 910.6	6 223 026.2	5.0	
08/09/2023	14:19:17	MCW-A-ST07A	Still	MCW-A-ST07A_09	206	-	643 915.1	6 223 028.5	643 908.0	6 223 025.0	7.9	
08/09/2023	14:20:10	MCW-A-ST07A	Still	MCW-A-ST07A_10	207	-	643 915.1	6 223 028.5	643 903.1	6 223 022.7	13.3	
08/09/2023	14:20:32	MCW-A-ST07A	Still	MCW-A-ST07A_11	208	-	643 915.1	6 223 028.5	643 901.0	6 223 021.7	15.6	
08/09/2023	14:21:11	MCW-A-ST07A	Still	MCW-A-ST07A_12	209	-	643 915.1	6 223 028.5	643 897.4	6 223 020.0	19.6	
08/09/2023	14:22:21	MCW-A-ST07A	Video	EOL	210	-	643 915.1	6 223 028.5	643 890.8	6 223 017.0	26.9	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
08/09/2023	14:45:00	MCW-A-ST07A	DVV	PC/FA	211	-	643 915.1	6 223 028.5	643 890.8	6 223 017.0	26.9	
08/09/2023	16:37:41	MCW-A-ST03	Video	SOL	212	74	646 757.3	6 225 342.1	646 751.3	6 225 373.8	32.3	
08/09/2023	16:37:52	MCW-A-ST03	Still	MCW-A-ST03_01	213	-	646 757.3	6 225 342.1	646 751.5	6 225 373.8	32.3	
08/09/2023	16:38:05	MCW-A-ST03	Still	MCW-A-ST03_02	214	-	646 757.3	6 225 342.1	646 751.2	6 225 372.7	31.2	
08/09/2023	16:39:24	MCW-A-ST03	Still	MCW-A-ST03_03	215	-	646 757.3	6 225 342.1	646 752.6	6 225 365.1	23.5	
08/09/2023	16:39:43	MCW-A-ST03	Still	MCW-A-ST03_04	216	-	646 757.3	6 225 342.1	646 753.0	6 225 362.8	21.2	
08/09/2023	16:40:25	MCW-A-ST03	Still	MCW-A-ST03_05	217	-	646 757.3	6 225 342.1	646 754.4	6 225 357.4	15.6	
08/09/2023	16:41:03	MCW-A-ST03	Still	MCW-A-ST03_06	218	-	646 757.3	6 225 342.1	646 755.0	6 225 354.2	12.3	
08/09/2023	16:41:22	MCW-A-ST03	Still	MCW-A-ST03_07	219	-	646 757.3	6 225 342.1	646 755.5	6 225 351.8	9.9	
08/09/2023	16:43:04	MCW-A-ST03	Still	MCW-A-ST03_08	220	-	646 757.3	6 225 342.1	646 757.3	6 225 341.8	0.2	
08/09/2023	16:43:49	MCW-A-ST03	Still	MCW-A-ST03_09	221	-	646 757.3	6 225 342.1	646 758.1	6 225 337.3	4.8	
08/09/2023	16:45:05	MCW-A-ST03	Still	MCW-A-ST03_10	222	-	646 757.3	6 225 342.1	646 759.6	6 225 329.9	12.3	
08/09/2023	16:45:50	MCW-A-ST03	Still	MCW-A-ST03_11	223	-	646 757.3	6 225 342.1	646 760.7	6 225 325.3	17.1	
08/09/2023	16:46:34	MCW-A-ST03	Still	MCW-A-ST03_12	224	-	646 757.3	6 225 342.1	646 761.6	6 225 320.4	22.1	
08/09/2023	16:47:24	MCW-A-ST03	Video	EOL	225	-	646 757.3	6 225 342.1	646 762.3	6 225 315.3	27.2	
08/09/2023	17:21:06	MCW-A-ST03	DVV	NS/NS	226	73	646 757.3	6 225 342.1	646 759.5	6 225 343.7	2.7	
08/09/2023	17:29:29	MCW-A-ST03	DVV	PC/FA	227	73	646 757.3	6 225 342.1	646 759.0	6 225 343.8	2.4	
12/09/2023	17:41:15	MCW-C-ST20	Video	SOL	228	45	657 485.3	6 219 984.4	657 510.6	6 219 953.3	40.1	
12/09/2023	17:41:55	MCW-C-ST20	Still	MCW-C-ST20_01	229	-	657 485.3	6 219 984.4	657 508.9	6 219 956.4	36.7	
12/09/2023	17:43:02	MCW-C-ST20	Still	MCW-C-ST20_02	230	-	657 485.3	6 219 984.4	657 505.5	6 219 962.1	30.1	
12/09/2023	17:43:39	MCW-C-ST20	Still	MCW-C-ST20_03	231	-	657 485.3	6 219 984.4	657 502.2	6 219 965.7	25.2	
12/09/2023	17:45:01	MCW-C-ST20	Still	MCW-C-ST20_04	232	-	657 485.3	6 219 984.4	657 495.9	6 219 971.5	16.8	
12/09/2023	17:45:32	MCW-C-ST20	Still	MCW-C-ST20_05	233	-	657 485.3	6 219 984.4	657 495.1	6 219 973.2	14.9	
12/09/2023	17:47:31	MCW-C-ST20	Still	MCW-C-ST20_06	234	-	657 485.3	6 219 984.4	657 486.7	6 219 982.6	2.3	
12/09/2023	17:49:03	MCW-C-ST20	Still	MCW-C-ST20_07	235	-	657 485.3	6 219 984.4	657 480.6	6 219 989.5	6.9	
12/09/2023	17:50:38	MCW-C-ST20	Still	MCW-C-ST20_08	236	-	657 485.3	6 219 984.4	657 474.1	6 219 997.6	17.3	
12/09/2023	17:51:11	MCW-C-ST20	Still	MCW-C-ST20_09	237	-	657 485.3	6 219 984.4	657 471.5	6 219 999.7	20.6	
12/09/2023	17:52:05	MCW-C-ST20	Still	MCW-C-ST20_10	NF	-	657 485.3	6 219 984.4	657 468.1	6 220 003.9	26.0	
12/09/2023	17:52:09	MCW-C-ST20	Video	EOL	238	-	657 485.3	6 219 984.4	657 467.8	6 220 004.3	26.5	
12/09/2023	18:17:01	MCW-C-ST20	DVV	PC/FA	239	45	657 485.3	6 219 984.4	657 483.2	6 219 982.5	2.8	
12/09/2023	19:23:44	MCW-C-ST31	Video	SOL	240	47	654 519.6	6 217 495.9	654 524.3	6 217 459.7	36.5	
12/09/2023	19:24:15	MCW-C-ST31	Still	MCW-C-ST31_01	241	-	654 519.6	6 217 495.9	654 524.4	6 217 461.9	34.4	
12/09/2023	19:24:47	MCW-C-ST31	Still	MCW-C-ST31_02	242	-	654 519.6	6 217 495.9	654 523.8	6 217 465.7	30.5	
12/09/2023	19:25:15	MCW-C-ST31	Still	MCW-C-ST31_03	243	-	654 519.6	6 217 495.9	654 523.2	6 217 469.1	27.0	
12/09/2023	19:27:19	MCW-C-ST31	Still	MCW-C-ST31_04	244	-	654 519.6	6 217 495.9	654 522.7	6 217 480.5	15.7	
12/09/2023	19:28:04	MCW-C-ST31	Still	MCW-C-ST31_05	245	-	654 519.6	6 217 495.9	654 521.0	6 217 485.6	10.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
12/09/2023	19:30:04	MCW-C-ST31	Still	MCW-C-ST31_06	246	-	654 519.6	6 217 495.9	654 518.6	6 217 497.7	2.0	
12/09/2023	19:31:52	MCW-C-ST31	Still	MCW-C-ST31_07	247	-	654 519.6	6 217 495.9	654 518.1	6 217 507.9	12.0	
12/09/2023	19:32:20	MCW-C-ST31	Still	MCW-C-ST31_08	248	-	654 519.6	6 217 495.9	654 517.1	6 217 511.2	15.5	
12/09/2023	19:32:59	MCW-C-ST31	Still	MCW-C-ST31_09	249	-	654 519.6	6 217 495.9	654 516.8	6 217 514.0	18.3	
12/09/2023	19:33:40	MCW-C-ST31	Still	MCW-C-ST31_10	250	-	654 519.6	6 217 495.9	654 515.9	6 217 518.6	23.0	
12/09/2023	19:34:10	MCW-C-ST31	Video	EOL	251	-	654 519.6	6 217 495.9	654 515.2	6 217 522.2	26.6	
12/09/2023	19:51:13	MCW-C-ST31	DVV	PC/FA	253	45	654 519.6	6 217 495.9	654 517.2	6 217 494.8	2.7	
12/09/2023	20:36:13	MCW-C-ST32	Video	SOL	254	45	657 080.4	6 217 686.5	657 077.1	6 217 652.2	34.5	
12/09/2023	20:36:46	MCW-C-ST32	Still	MCW-C-ST32_01	255	-	657 080.4	6 217 686.5	657 077.5	6 217 653.9	32.8	
12/09/2023	20:37:38	MCW-C-ST32	Still	MCW-C-ST32_02	256	-	657 080.4	6 217 686.5	657 077.1	6 217 659.8	26.9	
12/09/2023	20:37:58	MCW-C-ST32	Still	MCW-C-ST32_03	257	-	657 080.4	6 217 686.5	657 077.3	6 217 662.1	24.6	
12/09/2023	20:39:02	MCW-C-ST32	Still	MCW-C-ST32_04	258	-	657 080.4	6 217 686.5	657 078.0	6 217 669.1	17.6	
12/09/2023	20:40:35	MCW-C-ST32	Still	MCW-C-ST32_05	259	-	657 080.4	6 217 686.5	657 078.7	6 217 678.6	8.1	
12/09/2023	20:41:37	MCW-C-ST32	Still	MCW-C-ST32_06	260	-	657 080.4	6 217 686.5	657 079.2	6 217 684.8	2.1	
12/09/2023	20:42:19	MCW-C-ST32	Still	MCW-C-ST32_07	261	-	657 080.4	6 217 686.5	657 079.6	6 217 689.2	2.8	
12/09/2023	20:43:06	MCW-C-ST32	Still	MCW-C-ST32_08	262	-	657 080.4	6 217 686.5	657 080.4	6 217 693.5	7.0	
12/09/2023	20:44:16	MCW-C-ST32	Still	MCW-C-ST32_09	263	-	657 080.4	6 217 686.5	657 081.1	6 217 700.8	14.3	
12/09/2023	20:44:44	MCW-C-ST32	Still	MCW-C-ST32_10	264	-	657 080.4	6 217 686.5	657 081.5	6 217 703.2	16.8	
12/09/2023	20:46:05	MCW-C-ST32	Video	EOL	265	-	657 080.4	6 217 686.5	657 082.6	6 217 712.8	26.4	
12/09/2023	21:00:27	MCW-C-ST32	DVV	PC/FA	266	46	657 080.4	6 217 686.5	657 077.5	6 217 685.0	3.3	
12/09/2023	21:47:50	MCW-C-ST43	Video	SOL	267	46	657 107.2	6 215 098.2	657 099.3	6 215 065.0	34.2	
12/09/2023	21:48:40	MCW-C-ST43	Still	MCW-C-ST43_01	268	-	657 107.2	6 215 098.2	657 100.0	6 215 069.0	30.1	
12/09/2023	21:49:32	MCW-C-ST43	Still	MCW-C-ST43_02	269	-	657 107.2	6 215 098.2	657 101.1	6 215 074.2	24.8	
12/09/2023	21:50:49	MCW-C-ST43	Still	MCW-C-ST43_03	270	-	657 107.2	6 215 098.2	657 102.3	6 215 082.8	16.2	
12/09/2023	21:52:02	MCW-C-ST43	Still	MCW-C-ST43_04	271	-	657 107.2	6 215 098.2	657 104.2	6 215 089.8	8.9	
12/09/2023	21:52:47	MCW-C-ST43	Still	MCW-C-ST43_05	272	-	657 107.2	6 215 098.2	657 105.7	6 215 093.9	4.6	
12/09/2023	21:53:08	MCW-C-ST43	Still	MCW-C-ST43_06	273	-	657 107.2	6 215 098.2	657 106.3	6 215 095.8	2.6	
12/09/2023	21:54:28	MCW-C-ST43	Still	MCW-C-ST43_07	274	-	657 107.2	6 215 098.2	657 108.2	6 215 104.8	6.6	
12/09/2023	21:55:22	MCW-C-ST43	Still	MCW-C-ST43_08	275	-	657 107.2	6 215 098.2	657 109.7	6 215 110.8	12.8	
12/09/2023	21:55:29	MCW-C-ST43	Still	MCW-C-ST43_09	276	-	657 107.2	6 215 098.2	657 109.8	6 215 111.6	13.6	
12/09/2023	21:56:45	MCW-C-ST43	Still	MCW-C-ST43_10	277	-	657 107.2	6 215 098.2	657 111.2	6 215 117.8	19.9	
12/09/2023	21:57:30	MCW-C-ST43	Video	EOL	278	-	657 107.2	6 215 098.2	657 112.6	6 215 123.1	25.5	
12/09/2023	22:15:57	MCW-C-ST43	DVV	PC/FA	279	46	657 107.2	6 215 098.2	657 103.5	6 215 097.9	3.7	
12/09/2023	23:32:22	MCW-C-ST42	Video	SOL	280	46	654 589.7	6 214 943.9	654 566.4	6 214 919.7	33.6	
12/09/2023	23:32:35	MCW-C-ST42	Still	MCW-C-ST42_01	281	-	654 589.7	6 214 943.9	654 567.0	6 214 921.0	32.3	
12/09/2023	23:33:19	MCW-C-ST42	Still	MCW-C-ST42_02	282	-	654 589.7	6 214 943.9	654 570.0	6 214 923.9	28.0	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
12/09/2023	23:34:21	MCW-C-ST42	Still	MCW-C-ST42_03	283	-	654 589.7	6 214 943.9	654 574.6	6 214 928.2	21.8	
12/09/2023	23:35:10	MCW-C-ST42	Still	MCW-C-ST42_04	284	-	654 589.7	6 214 943.9	654 577.9	6 214 932.3	16.5	
12/09/2023	23:35:32	MCW-C-ST42	Still	MCW-C-ST42_05	285	-	654 589.7	6 214 943.9	654 579.3	6 214 934.1	14.2	
12/09/2023	23:36:20	MCW-C-ST42	Still	MCW-C-ST42_06	286	-	654 589.7	6 214 943.9	654 582.8	6 214 937.6	9.3	
12/09/2023	23:37:12	MCW-C-ST42	Still	MCW-C-ST42_07	287	-	654 589.7	6 214 943.9	654 587.1	6 214 941.1	3.8	
12/09/2023	23:37:45	MCW-C-ST42	Still	MCW-C-ST42_08	288	-	654 589.7	6 214 943.9	654 589.1	6 214 943.5	0.7	
12/09/2023	23:38:40	MCW-C-ST42	Still	MCW-C-ST42_09	289	-	654 589.7	6 214 943.9	654 593.3	6 214 947.8	5.3	
12/09/2023	23:39:19	MCW-C-ST42	Still	MCW-C-ST42_10	290	-	654 589.7	6 214 943.9	654 596.2	6 214 950.6	9.3	
12/09/2023	23:40:07	MCW-C-ST42	Still	MCW-C-ST42_11	291	-	654 589.7	6 214 943.9	654 600.0	6 214 953.6	14.2	
12/09/2023	23:40:47	MCW-C-ST42	Still	MCW-C-ST42_12	292	-	654 589.7	6 214 943.9	654 603.0	6 214 956.9	18.6	
12/09/2023	23:41:29	MCW-C-ST42	Still	MCW-C-ST42_13	293	-	654 589.7	6 214 943.9	654 605.8	6 214 960.0	22.8	
12/09/2023	23:42:03	MCW-C-ST42	Video	EOL	294	-	654 589.7	6 214 943.9	654 608.3	6 214 962.6	26.4	
13/09/2023	00:10:30	MCW-C-ST42	WS	TOP	295	5	654 589.7	6 214 943.9	654 589.5	6 214 943.2	0.7	
13/09/2023	00:15:50	MCW-C-ST42	WS	BOT	296	42	654 589.7	6 214 943.9	654 589.3	6 214 943.6	0.5	
13/09/2023	00:29:49	MCW-C-ST42	DVV	PC/FA	297	55	654 589.7	6 214 943.9	654 587.5	6 214 945.8	2.9	
13/09/2023	02:46:59	MCW-C-ST51	Video	SOL	298	55	649 221.2	6 212 397.3	649 241.5	6 212 426.7	35.7	
13/09/2023	02:47:21	MCW-C-ST51	Still	MCW-C-ST51_01	299	-	649 221.2	6 212 397.3	649 239.7	6 212 424.6	32.9	
13/09/2023	02:48:43	MCW-C-ST51	Still	MCW-C-ST51_02	300	-	649 221.2	6 212 397.3	649 235.1	6 212 417.6	24.6	
13/09/2023	02:49:12	MCW-C-ST51	Still	MCW-C-ST51_03	301	-	649 221.2	6 212 397.3	649 232.9	6 212 414.8	21.0	
13/09/2023	02:49:49	MCW-C-ST51	Still	MCW-C-ST51_04	302	-	649 221.2	6 212 397.3	649 231.0	6 212 411.5	17.2	
13/09/2023	02:50:42	MCW-C-ST51	Still	MCW-C-ST51_05	303	-	649 221.2	6 212 397.3	649 228.2	6 212 407.5	12.4	
13/09/2023	02:51:40	MCW-C-ST51	Still	MCW-C-ST51_06	304	-	649 221.2	6 212 397.3	649 224.6	6 212 402.1	5.9	
13/09/2023	02:52:32	MCW-C-ST51	Still	MCW-C-ST51_07	305	-	649 221.2	6 212 397.3	649 221.5	6 212 397.5	0.3	
13/09/2023	02:53:20	MCW-C-ST51	Still	MCW-C-ST51_08	307	-	649 221.2	6 212 397.3	649 218.8	6 212 393.5	4.6	
13/09/2023	02:54:07	MCW-C-ST51	Still	MCW-C-ST51_09	308	-	649 221.2	6 212 397.3	649 216.0	6 212 389.7	9.3	
13/09/2023	02:54:28	MCW-C-ST51	Still	MCW-C-ST51_10	309	-	649 221.2	6 212 397.3	649 214.7	6 212 387.6	11.7	
13/09/2023	02:55:05	MCW-C-ST51	Still	MCW-C-ST51_11	310	-	649 221.2	6 212 397.3	649 212.5	6 212 385.1	15.0	
13/09/2023	02:55:35	MCW-C-ST51	Still	MCW-C-ST51_12	311	-	649 221.2	6 212 397.3	649 210.7	6 212 382.2	18.4	
13/09/2023	02:56:11	MCW-C-ST51	Still	MCW-C-ST51_13	312	-	649 221.2	6 212 397.3	649 208.8	6 212 379.3	21.9	
13/09/2023	02:56:47	MCW-C-ST51	Video	EOL	313	-	649 221.2	6 212 397.3	649 206.3	6 212 376.1	25.9	
13/09/2023	03:17:44	MCW-C-ST51	WS	TOP	314	5	649 221.2	6 212 397.3	649 221.4	6 212 397.9	0.6	
13/09/2023	03:24:29	MCW-C-ST51	WS	BOT	315	52	649 221.2	6 212 397.3	649 222.4	6 212 399.9	2.8	
13/09/2023	03:41:47	MCW-C-ST51	DVV	PC	316	50	649 221.2	6 212 397.3	649 223.7	6 212 398.7	2.8	
13/09/2023	04:36:59	MCW-C-ST52	Video	SOL	317	50	651 625.9	6 212 457.0	651 655.8	6 212 473.5	34.2	
13/09/2023	04:37:19	MCW-C-ST52	Still	MCW-C-ST52_01	318	-	651 625.9	6 212 457.0	651 654.3	6 212 473.1	32.7	
13/09/2023	04:38:26	MCW-C-ST52	Still	MCW-C-ST52_02	319	-	651 625.9	6 212 457.0	651 647.4	6 212 469.8	25.1	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
13/09/2023	04:39:27	MCW-C-ST52	Still	MCW-C-ST52_03	320	-	651 625.9	6 212 457.0	651 642.2	6 212 466.5	18.9	
13/09/2023	04:39:58	MCW-C-ST52	Still	MCW-C-ST52_04	321	-	651 625.9	6 212 457.0	651 639.8	6 212 464.9	16.0	
13/09/2023	04:40:41	MCW-C-ST52	Still	MCW-C-ST52_05	322	-	651 625.9	6 212 457.0	651 635.9	6 212 462.5	11.4	
13/09/2023	04:41:23	MCW-C-ST52	Still	MCW-C-ST52_06	323	-	651 625.9	6 212 457.0	651 631.8	6 212 460.4	6.8	
13/09/2023	04:41:48	MCW-C-ST52	Still	MCW-C-ST52_07	324	-	651 625.9	6 212 457.0	651 629.4	6 212 459.3	4.2	
13/09/2023	04:42:27	MCW-C-ST52	Still	MCW-C-ST52_08	325	-	651 625.9	6 212 457.0	651 626.0	6 212 457.1	0.2	
13/09/2023	04:42:59	MCW-C-ST52	Still	MCW-C-ST52_09	326	-	651 625.9	6 212 457.0	651 623.5	6 212 455.5	2.8	
13/09/2023	04:43:47	MCW-C-ST52	Still	MCW-C-ST52_10	327	-	651 625.9	6 212 457.0	651 618.8	6 212 452.7	8.2	
13/09/2023	04:44:23	MCW-C-ST52	Still	MCW-C-ST52_11	328	-	651 625.9	6 212 457.0	651 615.9	6 212 451.0	11.6	
13/09/2023	04:45:05	MCW-C-ST52	Still	MCW-C-ST52_12	329	-	651 625.9	6 212 457.0	651 612.8	6 212 449.0	15.3	
13/09/2023	04:45:34	MCW-C-ST52	Still	MCW-C-ST52_13	330	-	651 625.9	6 212 457.0	651 609.5	6 212 447.7	18.8	
13/09/2023	04:46:43	MCW-C-ST52	Video	EOL	331	-	651 625.9	6 212 457.0	651 603.0	6 212 443.9	26.3	
13/09/2023	05:06:19	MCW-C-ST52	DVV	PC/FA	332	50	651 625.9	6 212 457.0	651 627.6	6 212 456.4	1.8	
13/09/2023	06:20:57	MCW-C-ST53	Video	SOL	333	50	654 502.8	6 212 260.2	654 496.3	6 212 296.1	36.5	
13/09/2023	06:21:22	MCW-C-ST53	Still	MCW-C-ST53_01	334	-	654 502.8	6 212 260.2	654 497.2	6 212 293.4	33.6	
13/09/2023	06:23:03	MCW-C-ST53	Still	MCW-C-ST53_02	335	-	654 502.8	6 212 260.2	654 497.9	6 212 283.5	23.8	
13/09/2023	06:23:46	MCW-C-ST53	Still	MCW-C-ST53_03	336	-	654 502.8	6 212 260.2	654 499.2	6 212 279.6	19.8	
13/09/2023	06:23:57	MCW-C-ST53	Still	MCW-C-ST53_04	337	-	654 502.8	6 212 260.2	654 499.8	6 212 278.4	18.5	
13/09/2023	06:24:34	MCW-C-ST53	Still	MCW-C-ST53_05	338	-	654 502.8	6 212 260.2	654 500.4	6 212 274.5	14.5	
13/09/2023	06:25:36	MCW-C-ST53	Still	MCW-C-ST53_06	339	-	654 502.8	6 212 260.2	654 501.2	6 212 268.3	8.2	
13/09/2023	06:26:13	MCW-C-ST53	Still	MCW-C-ST53_07	340	-	654 502.8	6 212 260.2	654 502.1	6 212 264.0	3.8	
13/09/2023	06:26:59	MCW-C-ST53	Still	MCW-C-ST53_08	341	-	654 502.8	6 212 260.2	654 503.2	6 212 259.3	1.0	
13/09/2023	06:27:28	MCW-C-ST53	Still	MCW-C-ST53_09	342	-	654 502.8	6 212 260.2	654 503.4	6 212 256.9	3.4	
13/09/2023	06:28:24	MCW-C-ST53	Still	MCW-C-ST53_10	343	-	654 502.8	6 212 260.2	654 504.5	6 212 251.2	9.2	
13/09/2023	06:29:13	MCW-C-ST53	Still	MCW-C-ST53_11	344	-	654 502.8	6 212 260.2	654 505.9	6 212 246.7	13.8	
13/09/2023	06:30:06	MCW-C-ST53	Still	MCW-C-ST53_12	345	-	654 502.8	6 212 260.2	654 506.3	6 212 240.9	19.6	
13/09/2023	06:30:17	MCW-C-ST53	Still	MCW-C-ST53_13	346	-	654 502.8	6 212 260.2	654 506.4	6 212 239.7	20.8	
13/09/2023	06:31:18	MCW-C-ST53	Video	EOL	347	-	654 502.8	6 212 260.2	654 508.1	6 212 233.2	27.5	
13/09/2023	06:52:02	MCW-C-ST53	DVV	FA/NS	348	50	654 502.8	6 212 260.2	654 503.4	6 212 260.1	0.6	
13/09/2023	07:02:41	MCW-C-ST53	DVV	PC	349	52	654 502.8	6 212 260.2	654 503.4	6 212 260.1	0.6	
13/09/2023	07:58:09	MCW-C-ST54	Video	SOL	350	52	657 296.2	6 212 376.3	657 295.1	6 212 408.4	32.1	
13/09/2023	07:58:43	MCW-C-ST54	Still	MCW-C-ST54_01	351	-	657 296.2	6 212 376.3	657 295.6	6 212 405.3	29.0	
13/09/2023	07:59:54	MCW-C-ST54	Still	MCW-C-ST54_02	352	-	657 296.2	6 212 376.3	657 294.9	6 212 397.4	21.2	
13/09/2023	08:00:16	MCW-C-ST54	Still	MCW-C-ST54_03	353	-	657 296.2	6 212 376.3	657 295.3	6 212 395.3	19.0	
13/09/2023	08:00:38	MCW-C-ST54	Still	MCW-C-ST54_04	354	-	657 296.2	6 212 376.3	657 295.6	6 212 393.3	17.0	
13/09/2023	08:01:33	MCW-C-ST54	Still	MCW-C-ST54_05	355	-	657 296.2	6 212 376.3	657 295.8	6 212 387.6	11.2	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
13/09/2023	08:02:21	MCW-C-ST54	Still	MCW-C-ST54_06	356	-	657 296.2	6 212 376.3	657 296.0	6 212 382.5	6.2	
13/09/2023	08:02:52	MCW-C-ST54	Still	MCW-C-ST54_07	357	-	657 296.2	6 212 376.3	657 296.4	6 212 379.5	3.2	
13/09/2023	08:03:18	MCW-C-ST54	Still	MCW-C-ST54_08	358	-	657 296.2	6 212 376.3	657 295.6	6 212 376.6	0.6	
13/09/2023	08:03:54	MCW-C-ST54	Still	MCW-C-ST54_09	359	-	657 296.2	6 212 376.3	657 295.5	6 212 372.8	3.6	
13/09/2023	08:04:39	MCW-C-ST54	Still	MCW-C-ST54_10	360	-	657 296.2	6 212 376.3	657 295.4	6 212 368.3	8.1	
13/09/2023	08:05:16	MCW-C-ST54	Still	MCW-C-ST54_11	361	-	657 296.2	6 212 376.3	657 295.3	6 212 364.0	12.3	
13/09/2023	08:05:55	MCW-C-ST54	Still	MCW-C-ST54_12	362	-	657 296.2	6 212 376.3	657 295.8	6 212 360.0	16.3	
13/09/2023	08:07:02	MCW-C-ST54	Still	MCW-C-ST54_13	363	-	657 296.2	6 212 376.3	657 296.9	6 212 353.8	22.5	
13/09/2023	08:07:35	MCW-C-ST54	Video	EOL	364	-	657 296.2	6 212 376.3	657 296.1	6 212 350.3	26.0	
13/09/2023	08:26:55	MCW-C-ST54	DVV	PC/FA	365	55	657 296.2	6 212 376.3	657 295.3	6 212 375.4	1.3	
16/09/2023	12:26:49	MCW-C-ST92	Video	SOL	366	55	641 244.2	6 199 176.8	641 227.4	6 199 153.9	28.5	
16/09/2023	12:28:06	MCW-C-ST92	Still	MCW-C-ST92_01	368	-	641 244.2	6 199 176.8	641 232.0	6 199 159.4	21.3	
16/09/2023	12:28:50	MCW-C-ST92	Still	MCW-C-ST92_02	370	-	641 244.2	6 199 176.8	641 234.4	6 199 164.4	15.8	
16/09/2023	12:29:48	MCW-C-ST92	Still	MCW-C-ST92_03	371	-	641 244.2	6 199 176.8	641 237.6	6 199 168.5	10.7	
16/09/2023	12:30:24	MCW-C-ST92	Still	MCW-C-ST92_04	372	-	641 244.2	6 199 176.8	641 240.3	6 199 171.7	6.4	
16/09/2023	12:31:21	MCW-C-ST92	Still	MCW-C-ST92_05	373	-	641 244.2	6 199 176.8	641 243.5	6 199 177.7	1.1	
16/09/2023	12:32:01	MCW-C-ST92	Still	MCW-C-ST92_06	374	-	641 244.2	6 199 176.8	641 245.6	6 199 180.4	3.8	
16/09/2023	12:32:26	MCW-C-ST92	Still	MCW-C-ST92_07	375	-	641 244.2	6 199 176.8	641 247.6	6 199 182.9	6.9	
16/09/2023	12:33:10	MCW-C-ST92	Still	MCW-C-ST92_08	376	-	641 244.2	6 199 176.8	641 250.5	6 199 186.1	11.2	
16/09/2023	12:33:40	MCW-C-ST92	Still	MCW-C-ST92_09	377	-	641 244.2	6 199 176.8	641 251.9	6 199 189.1	14.5	
16/09/2023	12:34:40	MCW-C-ST92	Still	MCW-C-ST92_10	378	-	641 244.2	6 199 176.8	641 255.7	6 199 193.7	20.4	
16/09/2023	12:35:11	MCW-C-ST92	Still	MCW-C-ST92_11	379	-	641 244.2	6 199 176.8	641 257.8	6 199 195.8	23.3	
16/09/2023	12:35:39	MCW-C-ST92	Video	EOL	380	-	641 244.2	6 199 176.8	641 258.7	6 199 198.1	25.7	
16/09/2023	12:54:00	MCW-C-ST92	WS	NS	381	5	641 244.2	6 199 176.8	641 243.3	6 199 177.0	0.9	
16/09/2023	13:00:00	MCW-C-ST92	WS	TOP	382	5	641 244.2	6 199 176.8	641 243.9	6 199 176.3	0.6	
16/09/2023	13:18:00	MCW-C-ST92	WS	BOT	383	50	641 244.2	6 199 176.8	641 243.7	6 199 177.0	0.6	
16/09/2023	13:43:00	MCW-C-ST92	DVV	PC	384	65	641 244.2	6 199 176.8	641 242.6	6 199 177.8	1.9	
16/09/2023	16:52:39	MCW-C-ST77	Video	SOL	385	65	644 143.5	6 204 220.4	644 161.2	6 204 242.0	27.9	
16/09/2023	16:52:58	MCW-C-ST77	Still	MCW-C-ST77_01	386	-	644 143.5	6 204 220.4	644 160.0	6 204 241.1	26.5	
16/09/2023	16:53:31	MCW-C-ST77	Still	MCW-C-ST77_02	387	-	644 143.5	6 204 220.4	644 157.7	6 204 238.9	23.2	
16/09/2023	16:53:58	MCW-C-ST77	Still	MCW-C-ST77_03	388	-	644 143.5	6 204 220.4	644 156.0	6 204 236.5	20.4	
16/09/2023	16:54:26	MCW-C-ST77	Still	MCW-C-ST77_04	389	-	644 143.5	6 204 220.4	644 154.3	6 204 233.8	17.2	
16/09/2023	16:55:21	MCW-C-ST77	Still	MCW-C-ST77_05	390	-	644 143.5	6 204 220.4	644 150.2	6 204 229.1	11.0	
16/09/2023	16:56:01	MCW-C-ST77	Still	MCW-C-ST77_06	391	-	644 143.5	6 204 220.4	644 147.5	6 204 226.1	6.9	
16/09/2023	16:56:18	MCW-C-ST77	Still	MCW-C-ST77_07	392	-	644 143.5	6 204 220.4	644 146.3	6 204 224.7	5.0	
16/09/2023	16:56:52	MCW-C-ST77	Still	MCW-C-ST77_08	393	-	644 143.5	6 204 220.4	644 144.2	6 204 222.2	1.9	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
16/09/2023	16:57:32	MCW-C-ST77	Still	MCW-C-ST77_09	394	-	644 143.5	6 204 220.4	644 141.5	6 204 218.5	2.8	
16/09/2023	16:58:36	MCW-C-ST77	Still	MCW-C-ST77_10	395	-	644 143.5	6 204 220.4	644 137.6	6 204 213.4	9.2	
16/09/2023	16:59:26	MCW-C-ST77	Still	MCW-C-ST77_11	396	-	644 143.5	6 204 220.4	644 134.5	6 204 209.4	14.2	
16/09/2023	16:59:47	MCW-C-ST77	Still	MCW-C-ST77_12	397	-	644 143.5	6 204 220.4	644 133.1	6 204 207.7	16.5	
16/09/2023	17:00:21	MCW-C-ST77	Still	MCW-C-ST77_13	398	-	644 143.5	6 204 220.4	644 130.6	6 204 204.5	20.5	
16/09/2023	17:01:27	MCW-C-ST77	Still	MCW-C-ST77_14	399	-	644 143.5	6 204 220.4	644 126.8	6 204 199.6	26.7	
16/09/2023	17:01:38	MCW-C-ST77	Video	EOL	400	-	644 143.5	6 204 220.4	644 126.3	6 204 198.7	27.7	
16/09/2023	17:35:00	MCW-C-ST77	DVV	PC	401	65	644 143.5	6 204 220.4	644 145.1	6 204 220.9	1.6	
16/09/2023	18:01:00	MCW-C-ST77	WS	TOP	402	5	644 143.5	6 204 220.4	644 144.7	6 204 221.6	1.7	
16/09/2023	18:15:00	MCW-C-ST77	WS	BOT	403	60	644 143.5	6 204 220.4	644 145.1	6 204 221.2	1.8	
16/09/2023	21:43:05	MCW-C-ST41	Video	SOL	404	55	651 703.6	6 215 133.0	651 608.4	6 215 065.1	116.9	
16/09/2023	21:43:30	MCW-C-ST41	Still	MCW-C-ST41_01	405	-	651 703.6	6 215 133.0	651 609.9	6 215 065.5	115.4	
16/09/2023	21:44:09	MCW-C-ST41	Still	MCW-C-ST41_02	406	-	651 703.6	6 215 133.0	651 612.7	6 215 068.3	111.6	
16/09/2023	21:45:17	MCW-C-ST41	Still	MCW-C-ST41_03	407	-	651 703.6	6 215 133.0	651 619.4	6 215 072.2	103.8	
16/09/2023	21:46:11	MCW-C-ST41	Still	MCW-C-ST41_04	408	-	651 703.6	6 215 133.0	651 624.1	6 215 075.4	98.1	
16/09/2023	21:47:00	MCW-C-ST41	Still	MCW-C-ST41_05	409	-	651 703.6	6 215 133.0	651 628.2	6 215 078.4	93.1	
16/09/2023	21:47:53	MCW-C-ST41	Still	MCW-C-ST41_06	410	-	651 703.6	6 215 133.0	651 633.0	6 215 080.0	88.3	
16/09/2023	21:48:17	MCW-C-ST41	Still	MCW-C-ST41_07	411	-	651 703.6	6 215 133.0	651 634.8	6 215 082.6	85.3	
16/09/2023	21:49:21	MCW-C-ST41	Still	MCW-C-ST41_08	412	-	651 703.6	6 215 133.0	651 640.0	6 215 085.9	79.1	
16/09/2023	21:50:34	MCW-C-ST41	Still	MCW-C-ST41_09	413	-	651 703.6	6 215 133.0	651 645.8	6 215 090.9	71.5	
16/09/2023	21:51:15	MCW-C-ST41	Still	MCW-C-ST41_10	414	-	651 703.6	6 215 133.0	651 649.4	6 215 093.5	67.1	
16/09/2023	21:52:37	MCW-C-ST41	Still	MCW-C-ST41_11	415	-	651 703.6	6 215 133.0	651 656.4	6 215 098.2	58.6	
16/09/2023	21:53:14	MCW-C-ST41	Still	MCW-C-ST41_12	416	-	651 703.6	6 215 133.0	651 659.4	6 215 100.4	54.9	
16/09/2023	21:53:48	MCW-C-ST41	Still	MCW-C-ST41_13	417	-	651 703.6	6 215 133.0	651 662.0	6 215 102.3	51.7	
16/09/2023	21:54:46	MCW-C-ST41	Still	MCW-C-ST41_14	418	-	651 703.6	6 215 133.0	651 666.8	6 215 105.7	45.8	
16/09/2023	21:55:45	MCW-C-ST41	Still	MCW-C-ST41_15	419	-	651 703.6	6 215 133.0	651 671.1	6 215 108.9	40.4	
16/09/2023	21:56:00	MCW-C-ST41	Still	MCW-C-ST41_16	420	-	651 703.6	6 215 133.0	651 672.5	6 215 109.9	38.7	
16/09/2023	21:56:27	MCW-C-ST41	Still	MCW-C-ST41_17	421	-	651 703.6	6 215 133.0	651 675.3	6 215 111.3	35.7	
16/09/2023	21:57:23	MCW-C-ST41	Still	MCW-C-ST41_18	422	-	651 703.6	6 215 133.0	651 680.2	6 215 115.1	29.4	
16/09/2023	21:58:16	MCW-C-ST41	Still	MCW-C-ST41_19	423	-	651 703.6	6 215 133.0	651 684.4	6 215 118.3	24.2	
16/09/2023	21:58:43	MCW-C-ST41	Still	MCW-C-ST41_20	424	-	651 703.6	6 215 133.0	651 686.7	6 215 120.3	21.1	
16/09/2023	21:59:25	MCW-C-ST41	Still	MCW-C-ST41_21	425	-	651 703.6	6 215 133.0	651 690.6	6 215 122.5	16.7	
16/09/2023	22:00:14	MCW-C-ST41	Still	MCW-C-ST41_22	426	-	651 703.6	6 215 133.0	651 694.7	6 215 126.1	11.2	
16/09/2023	22:00:39	MCW-C-ST41	Still	MCW-C-ST41_23	427	-	651 703.6	6 215 133.0	651 696.5	6 215 126.9	9.4	
16/09/2023	22:01:06	MCW-C-ST41	Still	MCW-C-ST41_24	428	-	651 703.6	6 215 133.0	651 698.7	6 215 128.1	6.9	
16/09/2023	22:02:02	MCW-C-ST41	Still	MCW-C-ST41_25	429	-	651 703.6	6 215 133.0	651 703.3	6 215 131.9	1.2	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
16/09/2023	22:02:43	MCW-C-ST41	Still	MCW-C-ST41_26	430	-	651 703.6	6 215 133.0	651 706.8	6 215 134.1	3.3	
16/09/2023	22:03:43	MCW-C-ST41	Still	MCW-C-ST41_27	431	-	651 703.6	6 215 133.0	651 711.9	6 215 138.1	9.8	
16/09/2023	22:04:10	MCW-C-ST41	Still	MCW-C-ST41_28	432	-	651 703.6	6 215 133.0	651 714.0	6 215 139.8	12.4	
16/09/2023	22:05:03	MCW-C-ST41	Still	MCW-C-ST41_29	433	-	651 703.6	6 215 133.0	651 718.5	6 215 143.2	18.1	
16/09/2023	22:05:56	MCW-C-ST41	Still	MCW-C-ST41_30	434	-	651 703.6	6 215 133.0	651 723.0	6 215 146.0	23.4	
16/09/2023	22:06:35	MCW-C-ST41	Video	EOL	435	-	651 703.6	6 215 133.0	651 726.4	6 215 148.6	27.6	
16/09/2023	22:23:00	MCW-C-ST41	DVV	PC/FA	436	50	651 703.6	6 215 133.0	651 701.2	6 215 129.6	4.2	
17/09/2023	00:36:03	MCW-C-ST63	Video	SOL	NF	50	654 497.1	6 209 644.6	654 466.3	6 209 648.3	31.0	
17/09/2023	00:36:13	MCW-C-ST63	Still	MCW-C-ST63_01	437	-	654 497.1	6 209 644.6	654 466.4	6 209 648.6	30.9	
17/09/2023	00:38:08	MCW-C-ST63	Still	MCW-C-ST63_02	438	-	654 497.1	6 209 644.6	654 473.2	6 209 647.7	24.1	
17/09/2023	00:39:08	MCW-C-ST63	Still	MCW-C-ST63_03	439	-	654 497.1	6 209 644.6	654 479.7	6 209 646.9	17.6	
17/09/2023	00:39:46	MCW-C-ST63	Still	MCW-C-ST63_04	440	-	654 497.1	6 209 644.6	654 483.5	6 209 646.3	13.7	
17/09/2023	00:40:33	MCW-C-ST63	Still	MCW-C-ST63_05	441	-	654 497.1	6 209 644.6	654 488.1	6 209 646.3	9.2	
17/09/2023	00:41:26	MCW-C-ST63	Still	MCW-C-ST63_06	442	-	654 497.1	6 209 644.6	654 493.6	6 209 645.0	3.5	
17/09/2023	00:42:22	MCW-C-ST63	Still	MCW-C-ST63_07	443	-	654 497.1	6 209 644.6	654 500.3	6 209 644.2	3.2	
17/09/2023	00:42:54	MCW-C-ST63	Still	MCW-C-ST63_08	444	-	654 497.1	6 209 644.6	654 503.4	6 209 643.8	6.4	
17/09/2023	00:43:47	MCW-C-ST63	Still	MCW-C-ST63_09	445	-	654 497.1	6 209 644.6	654 508.7	6 209 642.4	11.8	
17/09/2023	00:44:58	MCW-C-ST63	Still	MCW-C-ST63_10	446	-	654 497.1	6 209 644.6	654 515.9	6 209 641.6	19.0	
17/09/2023	00:45:34	MCW-C-ST63	Still	MCW-C-ST63_11	447	-	654 497.1	6 209 644.6	654 519.1	6 209 641.0	22.3	
17/09/2023	00:46:11	MCW-C-ST63	Still	MCW-C-ST63_12	NF	-	654 497.1	6 209 644.6	654 523.4	6 209 640.7	26.6	
17/09/2023	00:46:11	MCW-C-ST63	Video	EOL	448	-	654 497.1	6 209 644.6	654 523.4	6 209 640.7	26.6	
17/09/2023	01:09:00	MCW-C-ST63	WS	TOP	449	5	654 497.1	6 209 644.6	654 496.0	6 209 644.7	1.1	
17/09/2023	01:24:00	MCW-C-ST63	WS	BOT	450	45	654 497.1	6 209 644.6	654 495.6	6 209 644.6	1.5	
17/09/2023	01:46:00	MCW-C-ST63	DVV	PC/FA	451	50	654 497.1	6 209 644.6	654 498.0	6 209 647.3	2.9	
17/09/2023	03:22:52	MCW-C-ST62	Video	SOL	NF	50	651 805.5	6 209 585.5	651 792.6	6 209 616.5	33.6	
17/09/2023	03:23:16	MCW-C-ST62	Still	MCW-C-ST62_01	NF	-	651 805.5	6 209 585.5	651 792.9	6 209 616.7	33.7	
17/09/2023	03:24:27	MCW-C-ST62	Still	MCW-C-ST62_02	452	-	651 805.5	6 209 585.5	651 792.8	6 209 617.2	34.1	
17/09/2023	03:26:00	MCW-C-ST62	Still	MCW-C-ST62_03	453	-	651 805.5	6 209 585.5	651 792.8	6 209 616.1	33.2	
17/09/2023	03:27:20	MCW-C-ST62	Still	MCW-C-ST62_04	454	-	651 805.5	6 209 585.5	651 796.7	6 209 608.3	24.5	
17/09/2023	03:27:57	MCW-C-ST62	Still	MCW-C-ST62_05	455	-	651 805.5	6 209 585.5	651 798.0	6 209 605.0	20.9	
17/09/2023	03:28:38	MCW-C-ST62	Still	MCW-C-ST62_06	456	-	651 805.5	6 209 585.5	651 800.0	6 209 601.5	17.0	
17/09/2023	03:29:33	MCW-C-ST62	Still	MCW-C-ST62_07	457	-	651 805.5	6 209 585.5	651 802.6	6 209 596.4	11.3	
17/09/2023	03:30:48	MCW-C-ST62	Still	MCW-C-ST62_08	458	-	651 805.5	6 209 585.5	651 805.5	6 209 589.1	3.6	
17/09/2023	03:31:29	MCW-C-ST62	Still	MCW-C-ST62_09	459	-	651 805.5	6 209 585.5	651 805.9	6 209 584.2	1.3	
17/09/2023	03:32:20	MCW-C-ST62	Still	MCW-C-ST62_10	460	-	651 805.5	6 209 585.5	651 809.2	6 209 578.2	8.2	
17/09/2023	03:33:01	MCW-C-ST62	Still	MCW-C-ST62_11	461	-	651 805.5	6 209 585.5	651 810.8	6 209 576.0	10.9	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
17/09/2023	03:33:45	MCW-C-ST62	Still	MCW-C-ST62_12	462	-	651 805.5	6 209 585.5	651 811.7	6 209 570.9	15.9	
17/09/2023	03:34:18	MCW-C-ST62	Still	MCW-C-ST62_13	463	-	651 805.5	6 209 585.5	651 812.3	6 209 568.9	18.0	
17/09/2023	03:35:01	MCW-C-ST62	Still	MCW-C-ST62_14	464	-	651 805.5	6 209 585.5	651 814.9	6 209 564.1	23.4	
17/09/2023	03:35:39	MCW-C-ST62	Still	MCW-C-ST62_15	465	-	651 805.5	6 209 585.5	651 816.7	6 209 561.1	26.8	
17/09/2023	03:35:45	MCW-C-ST62	Video	EOL	NF	-	651 805.5	6 209 585.5	651 816.2	6 209 560.7	27.0	
17/09/2023	03:56:36	MCW-C-ST62	DVV	NS/NS	466	50	651 805.5	6 209 585.5	651 809.7	6 209 592.0	7.7	
17/09/2023	04:14:12	MCW-C-ST62	DVV	PC/FA	467	52	651 805.5	6 209 585.5	651 810.4	6 209 592.5	8.5	
17/09/2023	05:09:53	MCW-C-ST71	Video	SOL	468	52	651 606.3	6 207 218.9	651 617.5	6 207 254.8	37.5	
17/09/2023	05:10:09	MCW-C-ST71	Still	MCW-C-ST71_01	NF	-	651 606.3	6 207 218.9	651 617.8	6 207 254.9	37.8	
17/09/2023	05:12:07	MCW-C-ST71	Still	MCW-C-ST71_02	469	-	651 606.3	6 207 218.9	651 616.5	6 207 247.7	30.6	
17/09/2023	05:12:40	MCW-C-ST71	Still	MCW-C-ST71_03	470	-	651 606.3	6 207 218.9	651 616.0	6 207 244.2	27.0	
17/09/2023	05:13:38	MCW-C-ST71	Still	MCW-C-ST71_04	471	-	651 606.3	6 207 218.9	651 614.5	6 207 237.7	20.5	
17/09/2023	05:14:21	MCW-C-ST71	Still	MCW-C-ST71_05	472	-	651 606.3	6 207 218.9	651 612.9	6 207 234.8	17.2	
17/09/2023	05:15:33	MCW-C-ST71	Still	MCW-C-ST71_06	473	-	651 606.3	6 207 218.9	651 610.0	6 207 227.3	9.2	
17/09/2023	05:16:11	MCW-C-ST71	Still	MCW-C-ST71_07	474	-	651 606.3	6 207 218.9	651 609.6	6 207 223.5	5.7	
17/09/2023	05:17:05	MCW-C-ST71	Still	MCW-C-ST71_08	475	-	651 606.3	6 207 218.9	651 607.0	6 207 218.3	0.9	
17/09/2023	05:17:45	MCW-C-ST71	Still	MCW-C-ST71_09	476	-	651 606.3	6 207 218.9	651 605.7	6 207 213.5	5.5	
17/09/2023	05:18:24	MCW-C-ST71	Still	MCW-C-ST71_10	477	-	651 606.3	6 207 218.9	651 604.2	6 207 210.1	9.1	
17/09/2023	05:19:17	MCW-C-ST71	Still	MCW-C-ST71_11	478	-	651 606.3	6 207 218.9	651 604.2	6 207 204.8	14.3	
17/09/2023	05:20:06	MCW-C-ST71	Still	MCW-C-ST71_12	479	-	651 606.3	6 207 218.9	651 601.9	6 207 200.4	19.1	
17/09/2023	05:21:13	MCW-C-ST71	Still	MCW-C-ST71_13	NF	-	651 606.3	6 207 218.9	651 599.5	6 207 193.2	26.7	
17/09/2023	05:21:17	MCW-C-ST71	Video	EOL	480	-	651 606.3	6 207 218.9	651 599.1	6 207 192.7	27.2	
17/09/2023	05:39:59	MCW-C-ST71	DVV	NS/NS	481	52	651 606.3	6 207 218.9	651 608.9	6 207 221.8	3.9	
17/09/2023	05:53:26	MCW-C-ST71	DVV	PC/NS	482	52	651 606.3	6 207 218.9	651 609.3	6 207 220.0	3.2	
17/09/2023	06:11:16	MCW-C-ST71	DVV	FA/NS	483	52	651 606.3	6 207 218.9	651 609.0	6 207 214.6	5.2	
17/09/2023	07:41:26	MCW-C-ST70	Video	SOL	484	52	649 517.0	6 206 771.2	649 490.5	6 206 785.2	30.0	
17/09/2023	07:41:51	MCW-C-ST70	Still	MCW-C-ST70_01	NF	-	649 517.0	6 206 771.2	649 490.6	6 206 785.2	29.9	
17/09/2023	07:43:03	MCW-C-ST70	Still	MCW-C-ST70_02	485	-	649 517.0	6 206 771.2	649 493.1	6 206 784.3	27.2	
17/09/2023	07:44:15	MCW-C-ST70	Still	MCW-C-ST70_03	486	-	649 517.0	6 206 771.2	649 499.8	6 206 780.6	19.6	
17/09/2023	07:44:36	MCW-C-ST70	Still	MCW-C-ST70_04	487	-	649 517.0	6 206 771.2	649 501.4	6 206 779.1	17.5	
17/09/2023	07:45:16	MCW-C-ST70	Still	MCW-C-ST70_05	488	-	649 517.0	6 206 771.2	649 505.2	6 206 776.8	13.0	
17/09/2023	07:46:11	MCW-C-ST70	Still	MCW-C-ST70_06	489	-	649 517.0	6 206 771.2	649 510.7	6 206 774.9	7.3	
17/09/2023	07:46:50	MCW-C-ST70	Still	MCW-C-ST70_07	490	-	649 517.0	6 206 771.2	649 514.2	6 206 772.6	3.1	
17/09/2023	07:48:18	MCW-C-ST70	Still	MCW-C-ST70_08	491	-	649 517.0	6 206 771.2	649 521.9	6 206 767.9	5.9	
17/09/2023	07:49:23	MCW-C-ST70	Still	MCW-C-ST70_09	492	-	649 517.0	6 206 771.2	649 528.5	6 206 765.6	12.8	
17/09/2023	07:50:45	MCW-C-ST70	Still	MCW-C-ST70_10	493	-	649 517.0	6 206 771.2	649 536.0	6 206 761.3	21.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
17/09/2023	07:50:53	MCW-C-ST70	Still	MCW-C-ST70_11	494	-	649 517.0	6 206 771.2	649 536.1	6 206 760.9	21.7	
17/09/2023	07:51:54	MCW-C-ST70	Still	MCW-C-ST70_12	NF	-	649 517.0	6 206 771.2	649 541.6	6 206 757.9	28.0	
17/09/2023	07:51:58	MCW-C-ST70	Video	EOL	495	-	649 517.0	6 206 771.2	649 541.9	6 206 757.4	28.4	
17/09/2023	08:21:19	MCW-C-ST70	WS	TOP	496	7	649 517.0	6 206 771.2	649 516.5	6 206 770.4	47.0	
17/09/2023	08:36:32	MCW-C-ST70	WS	BOT	497	47	649 517.0	6 206 771.2	649 517.4	6 206 767.6	3.6	
17/09/2023	08:51:17	MCW-C-ST70	DVV	PC/FA	498	53	649 517.0	6 206 771.2	649 517.7	6 206 767.9	3.3	
17/09/2023	19:08:31	MCW-C-ST79	Video	SOL	499	53	649 114.1	6 204 475.0	649 121.6	6 204 505.9	31.8	
17/09/2023	19:08:57	MCW-C-ST79	Still	MCW-C-ST79_01	500	-	649 114.1	6 204 475.0	649 121.2	6 204 503.8	29.6	
17/09/2023	19:09:27	MCW-C-ST79	Still	MCW-C-ST79_02	501	-	649 114.1	6 204 475.0	649 120.1	6 204 499.8	25.5	
17/09/2023	19:10:05	MCW-C-ST79	Still	MCW-C-ST79_03	502	-	649 114.1	6 204 475.0	649 119.4	6 204 495.8	21.4	
17/09/2023	19:10:39	MCW-C-ST79	Still	MCW-C-ST79_04	503	-	649 114.1	6 204 475.0	649 118.5	6 204 492.7	18.1	
17/09/2023	19:11:24	MCW-C-ST79	Still	MCW-C-ST79_05	504	-	649 114.1	6 204 475.0	649 116.7	6 204 487.5	12.7	
17/09/2023	19:12:10	MCW-C-ST79	Still	MCW-C-ST79_06	505	-	649 114.1	6 204 475.0	649 115.3	6 204 483.0	8.0	
17/09/2023	19:12:45	MCW-C-ST79	Still	MCW-C-ST79_07	506	-	649 114.1	6 204 475.0	649 114.8	6 204 479.5	4.5	
17/09/2023	19:13:23	MCW-C-ST79	Still	MCW-C-ST79_08	507	-	649 114.1	6 204 475.0	649 113.6	6 204 475.9	1.0	
17/09/2023	19:14:13	MCW-C-ST79	Still	MCW-C-ST79_09	508	-	649 114.1	6 204 475.0	649 113.5	6 204 470.7	4.3	
17/09/2023	19:15:02	MCW-C-ST79	Still	MCW-C-ST79_10	509	-	649 114.1	6 204 475.0	649 113.6	6 204 466.0	9.1	
17/09/2023	19:15:39	MCW-C-ST79	Still	MCW-C-ST79_11	510	-	649 114.1	6 204 475.0	649 112.6	6 204 462.9	12.2	
17/09/2023	19:16:25	MCW-C-ST79	Still	MCW-C-ST79_12	511	-	649 114.1	6 204 475.0	649 111.7	6 204 457.9	17.3	
17/09/2023	19:17:04	MCW-C-ST79	Still	MCW-C-ST79_13	512	-	649 114.1	6 204 475.0	649 110.5	6 204 454.3	21.0	
17/09/2023	19:17:58	MCW-C-ST79	Video	EOL	513	-	649 114.1	6 204 475.0	649 108.1	6 204 449.1	26.6	
17/09/2023	19:35:00	MCW-C-ST79	DVV	PC/FA	514	55	649 114.1	6 204 475.0	649 117.1	6 204 475.3	2.9	
17/09/2023	21:46:15	MCW-C-ST75	Video	SOL	515	55	638 721.0	6 204 239.3	638 731.3	6 204 211.0	30.1	
17/09/2023	21:46:33	MCW-C-ST75	Still	MCW-C-ST75_01	516	-	638 721.0	6 204 239.3	638 729.5	6 204 212.7	27.9	
17/09/2023	21:47:01	MCW-C-ST75	Still	MCW-C-ST75_02	517	-	638 721.0	6 204 239.3	638 726.3	6 204 216.6	23.3	
17/09/2023	21:48:21	MCW-C-ST75	Still	MCW-C-ST75_03	519	-	638 721.0	6 204 239.3	638 723.2	6 204 223.2	16.3	
17/09/2023	21:48:59	MCW-C-ST75	Still	MCW-C-ST75_04	520	-	638 721.0	6 204 239.3	638 721.7	6 204 226.3	13.0	
17/09/2023	21:49:37	MCW-C-ST75	Still	MCW-C-ST75_05	521	-	638 721.0	6 204 239.3	638 719.9	6 204 230.0	9.4	
17/09/2023	21:50:30	MCW-C-ST75	Still	MCW-C-ST75_06	522	-	638 721.0	6 204 239.3	638 717.8	6 204 234.9	5.4	
17/09/2023	21:50:49	MCW-C-ST75	Still	MCW-C-ST75_07	523	-	638 721.0	6 204 239.3	638 717.5	6 204 236.9	4.3	
17/09/2023	21:51:54	MCW-C-ST75	Still	MCW-C-ST75_08	524	-	638 721.0	6 204 239.3	638 715.6	6 204 243.2	6.7	
17/09/2023	21:52:40	MCW-C-ST75	Still	MCW-C-ST75_09	525	-	638 721.0	6 204 239.3	638 714.0	6 204 247.6	10.9	
17/09/2023	21:52:50	MCW-C-ST75	Still	MCW-C-ST75_10	526	-	638 721.0	6 204 239.3	638 713.7	6 204 248.8	12.0	
17/09/2023	21:53:29	MCW-C-ST75	Still	MCW-C-ST75_11	527	-	638 721.0	6 204 239.3	638 711.8	6 204 252.4	16.0	
17/09/2023	21:53:54	MCW-C-ST75	Still	MCW-C-ST75_12	528	-	638 721.0	6 204 239.3	638 711.4	6 204 254.4	18.0	
17/09/2023	21:54:30	MCW-C-ST75	Still	MCW-C-ST75_13	529	-	638 721.0	6 204 239.3	638 709.9	6 204 258.4	22.1	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
17/09/2023	21:55:20	MCW-C-ST75	Video	EOL	530	-	638 721.0	6 204 239.3	638 707.4	6 204 262.7	27.1	
17/09/2023	22:08:00	MCW-C-ST75	WS	TOP	531	5	638 721.0	6 204 239.3	638 718.8	6 204 237.0	3.2	
17/09/2023	22:23:00	MCW-C-ST75	WS	BOT	532	52	638 721.0	6 204 239.3	638 714.6	6 204 245.5	8.9	
17/09/2023	22:35:00	MCW-C-ST75	DVV	PC	533	49	638 721.0	6 204 239.3	638 718.2	6 204 233.2	6.7	
23/09/2023	07:56:38	MCW-C-ST91	Video	SOL	NF	49	638 680.2	6 198 983.5	638 656.9	6 199 012.8	37.5	
23/09/2023	07:56:48	MCW-C-ST91	Still	MCW-C-ST91_01	534	-	638 680.2	6 198 983.5	638 656.7	6 199 013.4	38.1	
23/09/2023	07:58:15	MCW-C-ST91	Still	MCW-C-ST91_02	535	-	638 680.2	6 198 983.5	638 661.1	6 199 012.0	34.3	
23/09/2023	07:58:39	MCW-C-ST91	Still	MCW-C-ST91_03	536	-	638 680.2	6 198 983.5	638 663.5	6 199 008.9	30.5	
23/09/2023	07:59:20	MCW-C-ST91	Still	MCW-C-ST91_04	537	-	638 680.2	6 198 983.5	638 665.3	6 199 006.3	27.3	
23/09/2023	08:00:07	MCW-C-ST91	Still	MCW-C-ST91_05	538	-	638 680.2	6 198 983.5	638 668.0	6 199 001.9	22.1	
23/09/2023	08:01:03	MCW-C-ST91	Still	MCW-C-ST91_06	539	-	638 680.2	6 198 983.5	638 669.7	6 199 000.7	20.2	
23/09/2023	08:01:22	MCW-C-ST91	Still	MCW-C-ST91_07	540	-	638 680.2	6 198 983.5	638 670.7	6 198 999.2	18.4	
23/09/2023	08:02:13	MCW-C-ST91	Still	MCW-C-ST91_08	541	-	638 680.2	6 198 983.5	638 675.2	6 198 994.3	11.9	
23/09/2023	08:02:52	MCW-C-ST91	Still	MCW-C-ST91_09	542	-	638 680.2	6 198 983.5	638 676.9	6 198 991.3	8.5	
23/09/2023	08:03:26	MCW-C-ST91	Still	MCW-C-ST91_10	543	-	638 680.2	6 198 983.5	638 678.5	6 198 989.0	5.8	
23/09/2023	08:03:57	MCW-C-ST91	Still	MCW-C-ST91_11	544	-	638 680.2	6 198 983.5	638 681.4	6 198 986.3	3.1	
23/09/2023	08:05:13	MCW-C-ST91	Still	MCW-C-ST91_12	545	-	638 680.2	6 198 983.5	638 686.3	6 198 979.4	7.3	
23/09/2023	08:05:59	MCW-C-ST91	Still	MCW-C-ST91_13	546	-	638 680.2	6 198 983.5	638 689.0	6 198 976.6	11.2	
23/09/2023	08:06:21	MCW-C-ST91	Still	MCW-C-ST91_14	547	-	638 680.2	6 198 983.5	638 690.7	6 198 974.2	14.0	
23/09/2023	08:07:25	MCW-C-ST91	Still	MCW-C-ST91_15	548	-	638 680.2	6 198 983.5	638 693.9	6 198 969.0	19.9	
23/09/2023	08:08:05	MCW-C-ST91	Still	MCW-C-ST91_16	549	-	638 680.2	6 198 983.5	638 696.4	6 198 964.9	24.6	
23/09/2023	08:08:29	MCW-C-ST91	Still	MCW-C-ST91_17	550	-	638 680.2	6 198 983.5	638 697.7	6 198 963.1	26.8	
23/09/2023	08:08:44	MCW-C-ST91	Video	EOL	NF	-	638 680.2	6 198 983.5	638 699.7	6 198 961.7	29.1	
23/09/2023	08:35:00	MCW-C-ST91	DVV	NS/NS	551	48	638 680.2	6 198 983.5	638 684.4	6 198 983.6	4.2	
23/09/2023	09:33:51	MCW-C-ST83	Video	SOL	NF	48	638 764.7	6 201 665.2	638 745.9	6 201 691.6	32.4	
23/09/2023	09:34:25	MCW-C-ST83	Still	MCW-C-ST83_01	555	-	638 764.7	6 201 665.2	638 746.2	6 201 691.0	31.8	
23/09/2023	09:34:40	MCW-C-ST83	Still	MCW-C-ST83_02	556	-	638 764.7	6 201 665.2	638 746.4	6 201 690.3	31.1	
23/09/2023	09:35:05	MCW-C-ST83	Still	MCW-C-ST83_03	557	-	638 764.7	6 201 665.2	638 746.9	6 201 688.6	29.4	
23/09/2023	09:35:25	MCW-C-ST83	Still	MCW-C-ST83_04	558	-	638 764.7	6 201 665.2	638 748.1	6 201 686.6	27.1	
23/09/2023	09:35:40	MCW-C-ST83	Still	MCW-C-ST83_05	559	-	638 764.7	6 201 665.2	638 749.1	6 201 685.1	25.3	
23/09/2023	09:36:09	MCW-C-ST83	Still	MCW-C-ST83_06	560	-	638 764.7	6 201 665.2	638 751.3	6 201 682.3	21.7	
23/09/2023	09:36:56	MCW-C-ST83	Still	MCW-C-ST83_07	561	-	638 764.7	6 201 665.2	638 754.4	6 201 679.4	17.6	
23/09/2023	09:37:07	MCW-C-ST83	Still	MCW-C-ST83_08	562	-	638 764.7	6 201 665.2	638 755.2	6 201 678.5	16.4	
23/09/2023	09:37:33	MCW-C-ST83	Still	MCW-C-ST83_09	563	-	638 764.7	6 201 665.2	638 756.5	6 201 675.6	13.3	
23/09/2023	09:38:22	MCW-C-ST83	Still	MCW-C-ST83_10	564	-	638 764.7	6 201 665.2	638 759.5	6 201 671.6	8.3	
23/09/2023	09:38:58	MCW-C-ST83	Still	MCW-C-ST83_11	565	-	638 764.7	6 201 665.2	638 761.3	6 201 668.5	4.7	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
23/09/2023	09:39:40	MCW-C-ST83	Still	MCW-C-ST83_12	566	-	638 764.7	6 201 665.2	638 763.6	6 201 665.4	1.1	
23/09/2023	09:40:16	MCW-C-ST83	Still	MCW-C-ST83_13	567	-	638 764.7	6 201 665.2	638 766.0	6 201 661.9	3.5	
23/09/2023	09:41:05	MCW-C-ST83	Still	MCW-C-ST83_14	568	-	638 764.7	6 201 665.2	638 769.2	6 201 658.5	8.0	
23/09/2023	09:41:35	MCW-C-ST83	Still	MCW-C-ST83_15	569	-	638 764.7	6 201 665.2	638 771.3	6 201 655.5	11.7	
23/09/2023	09:41:59	MCW-C-ST83	Still	MCW-C-ST83_16	570	-	638 764.7	6 201 665.2	638 772.1	6 201 653.7	13.7	
23/09/2023	09:43:06	MCW-C-ST83	Still	MCW-C-ST83_17	571	-	638 764.7	6 201 665.2	638 776.2	6 201 646.6	21.8	
23/09/2023	09:43:54	MCW-C-ST83	Still	MCW-C-ST83_18	572	-	638 764.7	6 201 665.2	638 779.0	6 201 643.7	25.8	
23/09/2023	09:44:14	MCW-C-ST83	Still	MCW-C-ST83_19	573	-	638 764.7	6 201 665.2	638 780.4	6 201 642.4	27.7	
23/09/2023	09:44:19	MCW-C-ST83	Video	EOL	NF	-	638 764.7	6 201 665.2	638 780.5	6 201 642.1	27.9	Switched to Hamon Grab
23/09/2023	11:05:00	MCW-C-ST83	HG	NS	574	48	638 764.7	6 201 665.2	638 747.3	6 201 693.1	32.9	
23/09/2023	11:12:00	MCW-C-ST83	HG	NS	575	48	638 764.7	6 201 665.2	638 752.3	6 201 688.7	26.6	
23/09/2023	11:22:00	MCW-C-ST83	HG	NS	576	49	638 764.7	6 201 665.2	638 781.3	6 201 643.3	27.5	Undersized but PSD taken
23/09/2023	12:17:00	MCW-C-ST91	HG	PC	577	49	638 680.2	6 198 983.5	638 689.7	6 198 979.8	10.1	
23/09/2023	12:27:00	MCW-C-ST91	HG	NS	578	49	638 680.2	6 198 983.5	638 684.8	6 198 978.6	6.7	
23/09/2023	12:34:00	MCW-C-ST91	HG	NS	579	56	638 680.2	6 198 983.5	638 693.8	6 198 980.1	14.0	
09/10/2023	07:35:40	MCW-B-ST57	Video	SOL	NF	56	638 388.4	6 209 834.5	638 413.9	6 209 784.4	56.2	
09/10/2023	07:36:23	MCW-B-ST57	Still	MCW-B-ST57_01	580	-	638 388.4	6 209 834.5	638 415.0	6 209 784.0	57.1	
09/10/2023	07:37:21	MCW-B-ST57	Still	MCW-B-ST57_02	581	-	638 388.4	6 209 834.5	638 412.6	6 209 788.3	52.2	
09/10/2023	07:37:46	MCW-B-ST57	Still	MCW-B-ST57_03	582	-	638 388.4	6 209 834.5	638 411.0	6 209 791.2	48.9	
09/10/2023	07:38:48	MCW-B-ST57	Still	MCW-B-ST57_04	583	-	638 388.4	6 209 834.5	638 408.9	6 209 796.4	43.3	
09/10/2023	07:40:32	MCW-B-ST57	Still	MCW-B-ST57_05	584	-	638 388.4	6 209 834.5	638 402.5	6 209 806.6	31.3	
09/10/2023	07:40:58	MCW-B-ST57	Still	MCW-B-ST57_06	585	-	638 388.4	6 209 834.5	638 400.9	6 209 809.1	28.4	
09/10/2023	07:41:35	MCW-B-ST57	Still	MCW-B-ST57_07	586	-	638 388.4	6 209 834.5	638 399.3	6 209 811.8	25.2	
09/10/2023	07:43:13	MCW-B-ST57	Still	MCW-B-ST57_08	587	-	638 388.4	6 209 834.5	638 394.6	6 209 820.8	15.1	
09/10/2023	07:44:10	MCW-B-ST57	Still	MCW-B-ST57_09	588	-	638 388.4	6 209 834.5	638 392.3	6 209 825.9	9.5	
09/10/2023	07:45:02	MCW-B-ST57	Still	MCW-B-ST57_10	589	-	638 388.4	6 209 834.5	638 388.7	6 209 831.0	3.6	
09/10/2023	07:46:19	MCW-B-ST57	Still	MCW-B-ST57_11	590	-	638 388.4	6 209 834.5	638 386.3	6 209 837.7	3.8	
09/10/2023	07:47:46	MCW-B-ST57	Still	MCW-B-ST57_12	591	-	638 388.4	6 209 834.5	638 381.4	6 209 846.4	13.7	
09/10/2023	07:48:16	MCW-B-ST57	Still	MCW-B-ST57_13	592	-	638 388.4	6 209 834.5	638 379.7	6 209 849.0	16.9	
09/10/2023	07:49:20	MCW-B-ST57	Still	MCW-B-ST57_14	593	-	638 388.4	6 209 834.5	638 377.9	6 209 854.1	22.2	
09/10/2023	07:50:30	MCW-B-ST57	Still	MCW-B-ST57_15	594	-	638 388.4	6 209 834.5	638 373.9	6 209 860.4	29.7	
09/10/2023	07:51:09	MCW-B-ST57	Still	MCW-B-ST57_16	595	-	638 388.4	6 209 834.5	638 372.2	6 209 863.7	33.4	
09/10/2023	07:51:46	MCW-B-ST57	Still	MCW-B-ST57_17	596	-	638 388.4	6 209 834.5	638 370.3	6 209 867.5	37.6	
09/10/2023	07:52:38	MCW-B-ST57	Still	MCW-B-ST57_18	597	-	638 388.4	6 209 834.5	638 368.3	6 209 872.9	43.3	
09/10/2023	07:54:16	MCW-B-ST57	Still	MCW-B-ST57_19	598	-	638 388.4	6 209 834.5	638 363.7	6 209 881.8	53.3	
09/10/2023	07:54:16	MCW-B-ST57	Video	EOL	NF	-	638 388.4	6 209 834.5	638 364.0	6 209 882.0	53.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
09/10/2023	08:16:00	MCW-B-ST57	WS	TOP	599	5	638 388.4	6 209 834.5	638 391.2	6 209 834.4	2.8	
09/10/2023	08:29:00	MCW-B-ST57	WS	BOT	600	49	638 388.4	6 209 834.5	638 393.5	6 209 834.0	5.2	
09/10/2023	09:05:00	MCW-B-ST57	DVV	PC	601	63	638 388.4	6 209 834.5	638 385.8	6 209 840.6	6.6	
09/10/2023	10:12:32	MCW-B-ST59A	Video	SOL	NF	63	643 471.4	6 210 183.5	643 527.5	6 210 197.0	57.7	
09/10/2023	10:12:50	MCW-B-ST59A	Still	MCW-B-ST59A_01	602	-	643 471.4	6 210 183.5	643 527.1	6 210 196.5	57.3	
09/10/2023	10:15:26	MCW-B-ST59A	Still	MCW-B-ST59A_02	603	-	643 471.4	6 210 183.5	643 517.7	6 210 195.0	47.7	
09/10/2023	10:17:01	MCW-B-ST59A	Still	MCW-B-ST59A_03	604	-	643 471.4	6 210 183.5	643 507.7	6 210 192.4	37.4	
09/10/2023	10:17:54	MCW-B-ST59A	Still	MCW-B-ST59A_04	605	-	643 471.4	6 210 183.5	643 502.3	6 210 191.1	31.8	
09/10/2023	10:19:34	MCW-B-ST59A	Still	MCW-B-ST59A_05	606	-	643 471.4	6 210 183.5	643 492.5	6 210 188.3	21.7	
09/10/2023	10:20:16	MCW-B-ST59A	Still	MCW-B-ST59A_06	607	-	643 471.4	6 210 183.5	643 488.5	6 210 187.3	17.5	
09/10/2023	10:21:32	MCW-B-ST59A	Still	MCW-B-ST59A_07	608	-	643 471.4	6 210 183.5	643 480.5	6 210 185.2	9.3	
09/10/2023	10:22:39	MCW-B-ST59A	Still	MCW-B-ST59A_08	609	-	643 471.4	6 210 183.5	643 474.0	6 210 183.9	2.7	
09/10/2023	10:24:41	MCW-B-ST59A	Still	MCW-B-ST59A_09	610	-	643 471.4	6 210 183.5	643 461.8	6 210 180.2	10.1	
09/10/2023	10:26:48	MCW-B-ST59A	Still	MCW-B-ST59A_10	611	-	643 471.4	6 210 183.5	643 449.3	6 210 177.6	22.8	
09/10/2023	10:27:07	MCW-B-ST59A	Still	MCW-B-ST59A_11	612	-	643 471.4	6 210 183.5	643 448.5	6 210 177.7	23.6	
09/10/2023	10:28:28	MCW-B-ST59A	Still	MCW-B-ST59A_12	613	-	643 471.4	6 210 183.5	643 439.6	6 210 174.9	32.9	
09/10/2023	10:29:25	MCW-B-ST59A	Still	MCW-B-ST59A_13	614	-	643 471.4	6 210 183.5	643 434.1	6 210 173.4	38.7	
09/10/2023	10:31:20	MCW-B-ST59A	Still	MCW-B-ST59A_14	615	-	643 471.4	6 210 183.5	643 422.0	6 210 170.8	50.9	
09/10/2023	10:31:33	MCW-B-ST59A	Still	MCW-B-ST59A_15	616	-	643 471.4	6 210 183.5	643 421.3	6 210 171.0	51.6	
09/10/2023	10:31:36	MCW-B-ST59A	Video	EOL	NF	-	643 471.4	6 210 183.5	643 421.0	6 210 171.0	51.9	
09/10/2023	11:09:00	MCW-B-ST59A	WS	TOP	617	5	643 471.4	6 210 183.5	643 472.9	6 210 184.3	1.7	
09/10/2023	11:25:00	MCW-B-ST59A	WS	BOT	618	59	643 471.4	6 210 183.5	643 471.9	6 210 186.9	3.5	
09/10/2023	11:49:00	MCW-B-ST59A	DVV	PC	619	60	643 471.4	6 210 183.5	643 473.6	6 210 184.4	2.4	
15/10/2023	13:46:49	MCW-B-ST38A	Video	SOL	NF	60	644 136.5	6 214 657.6	644 192.7	6 214 646.5	57.3	
15/10/2023	13:47:03	MCW-B-ST38A	Still	MCW-B-ST38A_01	620	-	644 136.5	6 214 657.6	644 192.7	6 214 646.5	57.3	
15/10/2023	13:47:54	MCW-B-ST38A	Still	MCW-B-ST38A_02	621	-	644 136.5	6 214 657.6	644 191.9	6 214 645.0	56.8	
15/10/2023	13:48:18	MCW-B-ST38A	Still	MCW-B-ST38A_03	622	-	644 136.5	6 214 657.6	644 190.5	6 214 644.9	55.6	
15/10/2023	13:49:25	MCW-B-ST38A	Still	MCW-B-ST38A_04	623	-	644 136.5	6 214 657.6	644 181.3	6 214 646.4	46.2	
15/10/2023	13:49:54	MCW-B-ST38A	Still	MCW-B-ST38A_05	624	-	644 136.5	6 214 657.6	644 178.8	6 214 648.2	43.4	
15/10/2023	13:50:19	MCW-B-ST38A	Still	MCW-B-ST38A_06	625	-	644 136.5	6 214 657.6	644 176.3	6 214 648.3	41.0	
15/10/2023	13:50:32	MCW-B-ST38A	Still	MCW-B-ST38A_07	626	-	644 136.5	6 214 657.6	644 175.4	6 214 649.1	39.8	
15/10/2023	13:51:16	MCW-B-ST38A	Still	MCW-B-ST38A_08	627	-	644 136.5	6 214 657.6	644 170.6	6 214 650.3	34.9	
15/10/2023	13:51:50	MCW-B-ST38A	Still	MCW-B-ST38A_09	628	-	644 136.5	6 214 657.6	644 166.4	6 214 650.3	30.8	
15/10/2023	13:52:23	MCW-B-ST38A	Still	MCW-B-ST38A_10	629	-	644 136.5	6 214 657.6	644 163.1	6 214 651.5	27.4	
15/10/2023	13:52:59	MCW-B-ST38A	Still	MCW-B-ST38A_11	630	-	644 136.5	6 214 657.6	644 159.0	6 214 651.9	23.3	
15/10/2023	13:53:32	MCW-B-ST38A	Still	MCW-B-ST38A_12	631	-	644 136.5	6 214 657.6	644 155.6	6 214 651.9	20.0	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
15/10/2023	13:54:29	MCW-B-ST38A	Still	MCW-B-ST38A_13	632	-	644 136.5	6 214 657.6	644 150.0	6 214 653.1	14.3	
15/10/2023	13:55:08	MCW-B-ST38A	Still	MCW-B-ST38A_14	633	-	644 136.5	6 214 657.6	644 147.3	6 214 653.4	11.7	
15/10/2023	13:55:29	MCW-B-ST38A	Still	MCW-B-ST38A_15	634	-	644 136.5	6 214 657.6	644 145.2	6 214 653.1	9.9	
15/10/2023	13:56:36	MCW-B-ST38A	Still	MCW-B-ST38A_16	635	-	644 136.5	6 214 657.6	644 138.3	6 214 655.9	2.5	
15/10/2023	13:57:01	MCW-B-ST38A	Still	MCW-B-ST38A_17	636	-	644 136.5	6 214 657.6	644 135.2	6 214 656.4	1.7	
15/10/2023	13:57:43	MCW-B-ST38A	Still	MCW-B-ST38A_18	637	-	644 136.5	6 214 657.6	644 130.8	6 214 657.8	5.6	
15/10/2023	13:58:33	MCW-B-ST38A	Still	MCW-B-ST38A_19	638	-	644 136.5	6 214 657.6	644 125.8	6 214 658.6	10.7	
15/10/2023	13:59:53	MCW-B-ST38A	Still	MCW-B-ST38A_20	639	-	644 136.5	6 214 657.6	644 118.2	6 214 658.9	18.3	
15/10/2023	14:01:25	MCW-B-ST38A	Still	MCW-B-ST38A_21	640	-	644 136.5	6 214 657.6	644 107.8	6 214 662.4	29.0	
15/10/2023	14:01:53	MCW-B-ST38A	Still	MCW-B-ST38A_22	641	-	644 136.5	6 214 657.6	644 104.6	6 214 662.9	32.3	
15/10/2023	14:03:02	MCW-B-ST38A	Still	MCW-B-ST38A_23	642	-	644 136.5	6 214 657.6	644 098.2	6 214 663.9	38.7	
15/10/2023	14:03:31	MCW-B-ST38A	Still	MCW-B-ST38A_24	643	-	644 136.5	6 214 657.6	644 095.6	6 214 665.2	41.5	
15/10/2023	14:04:45	MCW-B-ST38A	Still	MCW-B-ST38A_25	644	-	644 136.5	6 214 657.6	644 088.4	6 214 668.1	49.2	
15/10/2023	14:04:58	MCW-B-ST38A	Video	EOL	645	-	644 136.5	6 214 657.6	644 087.4	6 214 668.1	50.2	
15/10/2023	14:58:19	MCW-B-ST38A	WS	TOP	646	5	644 136.5	6 214 657.6	644 140.2	6 214 661.0	5.1	
15/10/2023	15:11:49	MCW-B-ST38A	WS	BOT	647	55	644 136.5	6 214 657.6	644 139.0	6 214 661.1	4.3	
15/10/2023	15:33:12	MCW-B-ST38A	DVV	PC	648	62	644 136.5	6 214 657.6	644 137.9	6 214 662.2	4.8	
15/10/2023	16:59:10	MCW-B-ST28	Video	SOL	649	62	646 339.9	6 217 812.1	646 381.0	6 217 841.8	50.7	
15/10/2023	16:59:44	MCW-B-ST28	Still	MCW-B-ST28_01	650	-	646 339.9	6 217 812.1	646 379.8	6 217 840.4	48.9	
15/10/2023	17:00:06	MCW-B-ST28	Still	MCW-B-ST28_02	651	-	646 339.9	6 217 812.1	646 377.4	6 217 839.2	46.3	
15/10/2023	17:00:54	MCW-B-ST28	Still	MCW-B-ST28_03	652	-	646 339.9	6 217 812.1	646 372.3	6 217 836.9	40.9	
15/10/2023	17:01:29	MCW-B-ST28	Still	MCW-B-ST28_04	653	-	646 339.9	6 217 812.1	646 370.0	6 217 834.9	37.7	
15/10/2023	17:02:19	MCW-B-ST28	Still	MCW-B-ST28_05	654	-	646 339.9	6 217 812.1	646 365.2	6 217 831.9	32.2	
15/10/2023	17:03:12	MCW-B-ST28	Still	MCW-B-ST28_06	655	-	646 339.9	6 217 812.1	646 361.1	6 217 828.0	26.5	
15/10/2023	17:03:55	MCW-B-ST28	Still	MCW-B-ST28_07	656	-	646 339.9	6 217 812.1	646 357.5	6 217 826.4	22.7	
15/10/2023	17:04:30	MCW-B-ST28	Still	MCW-B-ST28_08	657	-	646 339.9	6 217 812.1	646 355.0	6 217 823.9	19.2	
15/10/2023	17:05:25	MCW-B-ST28	Still	MCW-B-ST28_09	658	-	646 339.9	6 217 812.1	646 350.0	6 217 820.0	12.8	
15/10/2023	17:06:40	MCW-B-ST28	Still	MCW-B-ST28_10	659	-	646 339.9	6 217 812.1	646 343.8	6 217 816.1	5.6	
15/10/2023	17:07:09	MCW-B-ST28	Still	MCW-B-ST28_11	660	-	646 339.9	6 217 812.1	646 341.4	6 217 814.2	2.6	
15/10/2023	17:08:00	MCW-B-ST28	Still	MCW-B-ST28_12	661	-	646 339.9	6 217 812.1	646 336.7	6 217 811.2	3.3	
15/10/2023	17:09:04	MCW-B-ST28	Still	MCW-B-ST28_13	662	-	646 339.9	6 217 812.1	646 331.9	6 217 807.6	9.2	
15/10/2023	17:10:08	MCW-B-ST28	Still	MCW-B-ST28_14	663	-	646 339.9	6 217 812.1	646 326.0	6 217 803.6	16.3	
15/10/2023	17:10:58	MCW-B-ST28	Still	MCW-B-ST28_15	664	-	646 339.9	6 217 812.1	646 321.9	6 217 800.1	21.6	
15/10/2023	17:11:59	MCW-B-ST28	Still	MCW-B-ST28_16	665	-	646 339.9	6 217 812.1	646 316.9	6 217 796.7	27.7	
15/10/2023	17:12:13	MCW-B-ST28	Still	MCW-B-ST28_17	666	-	646 339.9	6 217 812.1	646 315.8	6 217 796.3	28.8	
15/10/2023	17:14:14	MCW-B-ST28	Still	MCW-B-ST28_18	667	-	646 339.9	6 217 812.1	646 305.7	6 217 788.7	41.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
15/10/2023	17:14:26	MCW-B-ST28	Still	MCW-B-ST28_19	668	-	646 339.9	6 217 812.1	646 304.4	6 217 788.2	42.7	
15/10/2023	17:15:05	MCW-B-ST28	Still	MCW-B-ST28_20	669	-	646 339.9	6 217 812.1	646 301.2	6 217 785.9	46.7	
15/10/2023	17:15:44	MCW-B-ST28	Video	EOL	670	-	646 339.9	6 217 812.1	646 298.3	6 217 783.8	50.3	
15/10/2023	17:31:34	MCW-B-ST28	WS	TOP	671	5	646 339.9	6 217 812.1	646 340.8	6 217 811.7	1.0	
15/10/2023	17:39:15	MCW-B-ST28	WS	BOT	672	57	646 339.9	6 217 812.1	646 341.2	6 217 811.6	1.3	
15/10/2023	17:54:00	MCW-B-ST28	DVV	PC	673	60	646 339.9	6 217 812.1	646 340.4	6 217 812.0	0.5	
15/10/2023	18:43:52	MCW-B-ST29A	Video	SOL	674	60	649 544.8	6 217 237.8	649 612.7	6 217 240.5	67.9	
15/10/2023	18:44:48	MCW-B-ST29A	Still	MCW-B-ST29A_01	675	-	649 544.8	6 217 237.8	649 606.0	6 217 239.5	61.2	
15/10/2023	18:45:51	MCW-B-ST29A	Still	MCW-B-ST29A_02	676	-	649 544.8	6 217 237.8	649 599.3	6 217 240.1	54.5	
15/10/2023	18:46:06	MCW-B-ST29A	Still	MCW-B-ST29A_03	677	-	649 544.8	6 217 237.8	649 597.8	6 217 239.8	53.0	
15/10/2023	18:46:17	MCW-B-ST29A	Still	MCW-B-ST29A_04	678	-	649 544.8	6 217 237.8	649 596.4	6 217 239.8	51.6	
15/10/2023	18:47:40	MCW-B-ST29A	Still	MCW-B-ST29A_05	679	-	649 544.8	6 217 237.8	649 587.9	6 217 238.9	43.0	
15/10/2023	18:48:31	MCW-B-ST29A	Still	MCW-B-ST29A_06	680	-	649 544.8	6 217 237.8	649 582.2	6 217 239.1	37.4	
15/10/2023	18:49:45	MCW-B-ST29A	Still	MCW-B-ST29A_07	681	-	649 544.8	6 217 237.8	649 575.7	6 217 239.5	30.9	
15/10/2023	18:49:52	MCW-B-ST29A	Still	MCW-B-ST29A_08	682	-	649 544.8	6 217 237.8	649 574.6	6 217 239.4	29.8	
15/10/2023	18:50:21	MCW-B-ST29A	Still	MCW-B-ST29A_09	683	-	649 544.8	6 217 237.8	649 571.1	6 217 239.4	26.3	
15/10/2023	18:51:04	MCW-B-ST29A	Still	MCW-B-ST29A_10	684	-	649 544.8	6 217 237.8	649 565.9	6 217 238.9	21.1	
15/10/2023	18:52:04	MCW-B-ST29A	Still	MCW-B-ST29A_11	685	-	649 544.8	6 217 237.8	649 560.0	6 217 238.1	15.2	
15/10/2023	18:53:52	MCW-B-ST29A	Still	MCW-B-ST29A_12	686	-	649 544.8	6 217 237.8	649 550.5	6 217 238.3	5.7	
15/10/2023	18:54:14	MCW-B-ST29A	Still	MCW-B-ST29A_13	687	-	649 544.8	6 217 237.8	649 547.6	6 217 237.9	2.8	
15/10/2023	18:54:21	MCW-B-ST29A	Still	MCW-B-ST29A_14	688	-	649 544.8	6 217 237.8	649 547.5	6 217 237.9	2.6	
15/10/2023	18:56:19	MCW-B-ST29A	Still	MCW-B-ST29A_15	690	-	649 544.8	6 217 237.8	649 533.8	6 217 238.0	11.0	
15/10/2023	18:57:59	MCW-B-ST29A	Still	MCW-B-ST29A_16	691	-	649 544.8	6 217 237.8	649 524.2	6 217 237.4	20.6	
15/10/2023	18:58:21	MCW-B-ST29A	Still	MCW-B-ST29A_17	692	-	649 544.8	6 217 237.8	649 521.4	6 217 236.9	23.5	
15/10/2023	18:59:10	MCW-B-ST29A	Still	MCW-B-ST29A_18	693	-	649 544.8	6 217 237.8	649 516.9	6 217 236.8	28.0	
15/10/2023	18:59:43	MCW-B-ST29A	Still	MCW-B-ST29A_19	694	-	649 544.8	6 217 237.8	649 512.8	6 217 237.2	32.0	
15/10/2023	19:00:38	MCW-B-ST29A	Still	MCW-B-ST29A_20	695	-	649 544.8	6 217 237.8	649 508.3	6 217 237.1	36.5	
15/10/2023	19:01:13	MCW-B-ST29A	Still	MCW-B-ST29A_21	696	-	649 544.8	6 217 237.8	649 503.8	6 217 237.4	41.0	
15/10/2023	19:02:31	MCW-B-ST29A	Still	MCW-B-ST29A_22	697	-	649 544.8	6 217 237.8	649 496.0	6 217 237.1	48.8	
15/10/2023	19:03:05	MCW-B-ST29A	Video	EOL	698	-	649 544.8	6 217 237.8	649 492.7	6 217 236.7	52.2	
15/10/2023	19:22:56	MCW-B-ST29A	DVV	PC/FA	699	51	649 544.8	6 217 237.8	649 544.1	6 217 237.0	1.1	
15/10/2023	20:19:28	MCW-B-ST30A	Video	SOL	700	51	652 141.6	6 217 458.6	652 172.8	6 217 411.6	56.5	
15/10/2023	20:19:58	MCW-B-ST30A	Still	MCW-B-ST30A_01	701	-	652 141.6	6 217 458.6	652 172.2	6 217 413.0	54.9	
15/10/2023	20:21:11	MCW-B-ST30A	Still	MCW-B-ST30A_02	702	-	652 141.6	6 217 458.6	652 167.9	6 217 418.9	47.6	
15/10/2023	20:22:05	MCW-B-ST30A	Still	MCW-B-ST30A_03	703	-	652 141.6	6 217 458.6	652 164.4	6 217 424.2	41.3	
15/10/2023	20:22:58	MCW-B-ST30A	Still	MCW-B-ST30A_04	704	-	652 141.6	6 217 458.6	652 161.3	6 217 429.3	35.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
15/10/2023	20:23:27	MCW-B-ST30A	Still	MCW-B-ST30A_05	705	-	652 141.6	6 217 458.6	652 159.5	6 217 431.4	32.5	
15/10/2023	20:23:56	MCW-B-ST30A	Still	MCW-B-ST30A_06	706	-	652 141.6	6 217 458.6	652 157.9	6 217 433.5	30.0	
15/10/2023	20:24:57	MCW-B-ST30A	Still	MCW-B-ST30A_07	707	-	652 141.6	6 217 458.6	652 154.6	6 217 438.1	24.3	
15/10/2023	20:26:35	MCW-B-ST30A	Still	MCW-B-ST30A_08	708	-	652 141.6	6 217 458.6	652 149.3	6 217 447.6	13.5	
15/10/2023	20:27:26	MCW-B-ST30A	Still	MCW-B-ST30A_09	709	-	652 141.6	6 217 458.6	652 145.8	6 217 451.9	7.9	
15/10/2023	20:28:23	MCW-B-ST30A	Still	MCW-B-ST30A_10	710	-	652 141.6	6 217 458.6	652 142.8	6 217 456.4	2.6	
15/10/2023	20:29:09	MCW-B-ST30A	Still	MCW-B-ST30A_11	711	-	652 141.6	6 217 458.6	652 140.0	6 217 461.3	3.1	
15/10/2023	20:29:24	MCW-B-ST30A	Still	MCW-B-ST30A_12	712	-	652 141.6	6 217 458.6	652 138.7	6 217 462.8	5.0	
15/10/2023	20:30:01	MCW-B-ST30A	Still	MCW-B-ST30A_13	713	-	652 141.6	6 217 458.6	652 136.5	6 217 465.6	8.6	
15/10/2023	20:30:58	MCW-B-ST30A	Still	MCW-B-ST30A_14	714	-	652 141.6	6 217 458.6	652 133.7	6 217 469.0	13.0	
15/10/2023	20:33:36	MCW-B-ST30A	Still	MCW-B-ST30A_15	716	-	652 141.6	6 217 458.6	652 124.3	6 217 483.1	30.0	
15/10/2023	20:34:33	MCW-B-ST30A	Still	MCW-B-ST30A_16	717	-	652 141.6	6 217 458.6	652 121.6	6 217 487.1	34.8	
15/10/2023	20:35:04	MCW-B-ST30A	Still	MCW-B-ST30A_17	718	-	652 141.6	6 217 458.6	652 119.8	6 217 489.7	38.0	
15/10/2023	20:36:08	MCW-B-ST30A	Still	MCW-B-ST30A_18	719	-	652 141.6	6 217 458.6	652 116.3	6 217 495.7	44.9	
15/10/2023	20:37:01	MCW-B-ST30A	Video	EOL	720	5	652 141.6	6 217 458.6	652 112.3	6 217 501.2	51.7	
15/10/2023	20:52:35	MCW-B-ST30A	WS	TOP	721	46	652 141.6	6 217 458.6	652 143.5	6 217 457.3	2.3	
15/10/2023	20:59:31	MCW-B-ST30A	WS	BOT	722	51	652 141.6	6 217 458.6	652 142.3	6 217 455.5	3.2	
15/10/2023	21:17:45	MCW-B-ST30A	DVV	PC/FA	723	51	652 141.6	6 217 458.6	652 140.1	6 217 454.2	4.7	
15/10/2023	22:21:55	MCW-B-ST19A	Video	SOL	724	51	654 912.3	6 219 783.6	654 910.7	6 219 719.9	63.7	
15/10/2023	22:22:25	MCW-B-ST19A	Still	MCW-B-ST19A_01	725	-	654 912.3	6 219 783.6	654 910.9	6 219 722.6	61.0	
15/10/2023	22:22:34	MCW-B-ST19A	Still	MCW-B-ST19A_02	726	-	654 912.3	6 219 783.6	654 911.0	6 219 723.7	59.9	
15/10/2023	22:23:19	MCW-B-ST19A	Still	MCW-B-ST19A_03	727	-	654 912.3	6 219 783.6	654 910.9	6 219 728.0	55.5	
15/10/2023	22:24:12	MCW-B-ST19A	Still	MCW-B-ST19A_04	728	-	654 912.3	6 219 783.6	654 909.4	6 219 733.1	50.6	
15/10/2023	22:25:21	MCW-B-ST19A	Still	MCW-B-ST19A_05	729	-	654 912.3	6 219 783.6	654 907.2	6 219 739.9	44.0	
15/10/2023	22:26:15	MCW-B-ST19A	Still	MCW-B-ST19A_06	730	-	654 912.3	6 219 783.6	654 906.8	6 219 746.3	37.7	
15/10/2023	22:26:59	MCW-B-ST19A	Still	MCW-B-ST19A_07	731	-	654 912.3	6 219 783.6	654 906.9	6 219 750.3	33.7	
15/10/2023	22:27:58	MCW-B-ST19A	Still	MCW-B-ST19A_08	732	-	654 912.3	6 219 783.6	654 907.6	6 219 756.4	27.6	
15/10/2023	22:28:45	MCW-B-ST19A	Still	MCW-B-ST19A_09	733	-	654 912.3	6 219 783.6	654 908.3	6 219 761.6	22.3	
15/10/2023	22:29:26	MCW-B-ST19A	Still	MCW-B-ST19A_10	734	-	654 912.3	6 219 783.6	654 908.2	6 219 765.7	18.4	
15/10/2023	22:30:26	MCW-B-ST19A	Still	MCW-B-ST19A_11	735	-	654 912.3	6 219 783.6	654 908.0	6 219 771.5	12.8	
15/10/2023	22:31:10	MCW-B-ST19A	Still	MCW-B-ST19A_12	736	-	654 912.3	6 219 783.6	654 908.7	6 219 776.2	8.2	
15/10/2023	22:32:20	MCW-B-ST19A	Still	MCW-B-ST19A_13	737	-	654 912.3	6 219 783.6	654 909.4	6 219 783.7	3.0	
15/10/2023	22:33:04	MCW-B-ST19A	Still	MCW-B-ST19A_14	738	-	654 912.3	6 219 783.6	654 909.0	6 219 788.5	5.9	
15/10/2023	22:33:40	MCW-B-ST19A	Still	MCW-B-ST19A_15	739	-	654 912.3	6 219 783.6	654 909.5	6 219 791.1	8.0	
15/10/2023	22:34:25	MCW-B-ST19A	Still	MCW-B-ST19A_16	740	-	654 912.3	6 219 783.6	654 909.5	6 219 795.9	12.6	
15/10/2023	22:35:07	MCW-B-ST19A	Still	MCW-B-ST19A_17	741	-	654 912.3	6 219 783.6	654 909.7	6 219 801.5	18.2	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
15/10/2023	22:35:52	MCW-B-ST19A	Still	MCW-B-ST19A_18	742	-	654 912.3	6 219 783.6	654 909.7	6 219 805.8	22.4	
15/10/2023	22:36:43	MCW-B-ST19A	Still	MCW-B-ST19A_19	743	-	654 912.3	6 219 783.6	654 910.2	6 219 810.7	27.3	
15/10/2023	22:37:12	MCW-B-ST19A	Still	MCW-B-ST19A_20	744	-	654 912.3	6 219 783.6	654 910.3	6 219 814.0	30.5	
15/10/2023	22:37:53	MCW-B-ST19A	Still	MCW-B-ST19A_21	745	-	654 912.3	6 219 783.6	654 910.3	6 219 817.9	34.4	
15/10/2023	22:39:21	MCW-B-ST19A	Still	MCW-B-ST19A_22	746	-	654 912.3	6 219 783.6	654 910.3	6 219 826.5	43.0	
15/10/2023	22:39:58	MCW-B-ST19A	Still	MCW-B-ST19A_23	747	-	654 912.3	6 219 783.6	654 911.1	6 219 831.0	47.4	
15/10/2023	22:40:27	MCW-B-ST19A	Still	MCW-B-ST19A_24	NF	-	654 912.3	6 219 783.6	654 911.2	6 219 834.5	50.9	
15/10/2023	22:40:31	MCW-B-ST19A	Video	EOL	748	-	654 912.3	6 219 783.6	654 911.1	6 219 834.7	51.1	
15/10/2023	23:35:06	MCW-B-ST19A	DVV	PC/FA	749	52	654 912.3	6 219 783.6	654 909.3	6 219 783.9	3.0	
16/10/2023	00:58:58	MCW-B-ST18A	Video	SOL	750	52	651 370.4	6 220 727.7	651 412.7	6 220 771.5	60.9	
16/10/2023	01:00:59	MCW-B-ST18A	Still	MCW-B-ST18A_01	751	-	651 370.4	6 220 727.7	651 412.4	6 220 770.4	59.9	
16/10/2023	01:01:59	MCW-B-ST18A	Still	MCW-B-ST18A_02	752	-	651 370.4	6 220 727.7	651 408.5	6 220 765.2	53.5	
16/10/2023	01:02:27	MCW-B-ST18A	Still	MCW-B-ST18A_03	753	-	651 370.4	6 220 727.7	651 406.6	6 220 763.3	50.7	
16/10/2023	01:02:49	MCW-B-ST18A	Still	MCW-B-ST18A_04	754	-	651 370.4	6 220 727.7	651 404.3	6 220 762.1	48.3	
16/10/2023	01:04:08	MCW-B-ST18A	Still	MCW-B-ST18A_05	755	-	651 370.4	6 220 727.7	651 399.4	6 220 755.6	40.3	
16/10/2023	01:05:03	MCW-B-ST18A	Still	MCW-B-ST18A_06	756	-	651 370.4	6 220 727.7	651 395.0	6 220 751.2	34.0	
16/10/2023	01:06:59	MCW-B-ST18A	Still	MCW-B-ST18A_07	757	-	651 370.4	6 220 727.7	651 386.2	6 220 742.6	21.7	
16/10/2023	01:07:09	MCW-B-ST18A	Still	MCW-B-ST18A_08	758	-	651 370.4	6 220 727.7	651 385.5	6 220 741.6	20.5	
16/10/2023	01:07:50	MCW-B-ST18A	Still	MCW-B-ST18A_09	759	-	651 370.4	6 220 727.7	651 382.3	6 220 738.7	16.2	
16/10/2023	01:09:45	MCW-B-ST18A	Still	MCW-B-ST18A_10	760	-	651 370.4	6 220 727.7	651 374.4	6 220 729.5	4.4	
16/10/2023	01:10:42	MCW-B-ST18A	Still	MCW-B-ST18A_11	761	-	651 370.4	6 220 727.7	651 370.4	6 220 725.9	1.8	
16/10/2023	01:11:14	MCW-B-ST18A	Still	MCW-B-ST18A_12	762	-	651 370.4	6 220 727.7	651 368.1	6 220 723.6	4.7	
16/10/2023	01:13:46	MCW-B-ST18A	Still	MCW-B-ST18A_13	763	-	651 370.4	6 220 727.7	651 358.3	6 220 711.5	20.3	
16/10/2023	01:16:04	MCW-B-ST18A	Still	MCW-B-ST18A_14	764	-	651 370.4	6 220 727.7	651 347.1	6 220 701.8	34.9	
16/10/2023	01:17:17	MCW-B-ST18A	Still	MCW-B-ST18A_15	765	-	651 370.4	6 220 727.7	651 342.7	6 220 696.2	41.9	
16/10/2023	01:18:59	MCW-B-ST18A	Still	MCW-B-ST18A_16	766	-	651 370.4	6 220 727.7	651 335.6	6 220 688.0	52.7	
16/10/2023	01:19:10	MCW-B-ST18A	Video	EOL	767	-	651 370.4	6 220 727.7	651 335.2	6 220 687.3	53.6	
16/10/2023	01:43:07	MCW-B-ST18A	WS	TOP	768	5	651 370.4	6 220 727.7	651 370.9	6 220 729.2	1.6	
16/10/2023	01:53:05	MCW-B-ST18A	WS	BOT	769	47	651 370.4	6 220 727.7	651 369.1	6 220 730.5	3.0	
16/10/2023	02:20:06	MCW-B-ST18A	DVV	PC/FA	770	58	651 370.4	6 220 727.7	651 371.1	6 220 729.2	1.6	
16/10/2023	03:07:53	MCW-B-ST17A	Video	SOL	771	58	649 155.4	6 220 174.6	649 187.5	6 220 216.9	53.1	
16/10/2023	03:08:17	MCW-B-ST17A	Still	MCW-B-ST17A_01	772	-	649 155.4	6 220 174.6	649 187.3	6 220 216.8	52.9	
16/10/2023	03:11:12	MCW-B-ST17A	Still	MCW-B-ST17A_02	773	-	649 155.4	6 220 174.6	649 180.1	6 220 206.6	40.5	
16/10/2023	03:13:48	MCW-B-ST17A	Still	MCW-B-ST17A_03	774	-	649 155.4	6 220 174.6	649 169.3	6 220 194.5	24.3	
16/10/2023	03:14:16	MCW-B-ST17A	Still	MCW-B-ST17A_04	775	-	649 155.4	6 220 174.6	649 167.7	6 220 192.2	21.5	
16/10/2023	03:14:45	MCW-B-ST17A	Still	MCW-B-ST17A_05	776	-	649 155.4	6 220 174.6	649 165.9	6 220 189.6	18.3	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
16/10/2023	03:16:12	MCW-B-ST17A	Still	MCW-B-ST17A_06	777	-	649 155.4	6 220 174.6	649 160.7	6 220 182.6	9.6	
16/10/2023	03:17:33	MCW-B-ST17A	Still	MCW-B-ST17A_07	778	-	649 155.4	6 220 174.6	649 154.7	6 220 176.3	1.9	
16/10/2023	03:20:12	MCW-B-ST17A	Still	MCW-B-ST17A_08	779	-	649 155.4	6 220 174.6	649 144.6	6 220 163.7	15.4	
16/10/2023	03:21:38	MCW-B-ST17A	Still	MCW-B-ST17A_09	780	-	649 155.4	6 220 174.6	649 138.5	6 220 157.1	24.3	
16/10/2023	03:24:20	MCW-B-ST17A	Still	MCW-B-ST17A_10	781	-	649 155.4	6 220 174.6	649 128.5	6 220 144.0	40.8	
16/10/2023	03:25:52	MCW-B-ST17A	Video	EOL	782	-	649 155.4	6 220 174.6	649 122.9	6 220 136.9	49.7	
16/10/2023	03:45:51	MCW-B-ST17A	DVV	PC/FA	783	51	649 155.4	6 220 174.6	649 157.7	6 220 178.0	4.1	
16/10/2023	04:51:34	MCW-B-ST10	Video	SOL	784	51	652 120.3	6 222 662.4	652 151.9	6 222 703.7	52.0	
16/10/2023	04:53:50	MCW-B-ST10	Still	MCW-B-ST10_01	785	-	652 120.3	6 222 662.4	652 147.4	6 222 698.7	45.4	
16/10/2023	04:56:00	MCW-B-ST10	Still	MCW-B-ST10_02	786	-	652 120.3	6 222 662.4	652 139.5	6 222 687.5	31.6	
16/10/2023	04:57:58	MCW-B-ST10	Still	MCW-B-ST10_03	787	-	652 120.3	6 222 662.4	652 132.0	6 222 676.9	18.7	
16/10/2023	04:58:45	MCW-B-ST10	Still	MCW-B-ST10_04	788	-	652 120.3	6 222 662.4	652 129.0	6 222 672.7	13.6	
16/10/2023	05:00:03	MCW-B-ST10	Still	MCW-B-ST10_05	789	-	652 120.3	6 222 662.4	652 124.4	6 222 666.6	5.9	
16/10/2023	05:01:39	MCW-B-ST10	Still	MCW-B-ST10_06	790	-	652 120.3	6 222 662.4	652 117.8	6 222 659.3	3.9	
16/10/2023	05:01:59	MCW-B-ST10	Still	MCW-B-ST10_07	791	-	652 120.3	6 222 662.4	652 116.4	6 222 657.3	6.3	
16/10/2023	05:02:40	MCW-B-ST10	Still	MCW-B-ST10_08	792	-	652 120.3	6 222 662.4	652 114.3	6 222 653.7	10.5	
16/10/2023	05:04:51	MCW-B-ST10	Still	MCW-B-ST10_09	793	-	652 120.3	6 222 662.4	652 106.6	6 222 642.9	23.8	
16/10/2023	05:05:52	MCW-B-ST10	Still	MCW-B-ST10_10	794	-	652 120.3	6 222 662.4	652 102.2	6 222 638.1	30.2	
16/10/2023	05:06:15	MCW-B-ST10	Still	MCW-B-ST10_11	795	-	652 120.3	6 222 662.4	652 100.9	6 222 636.4	32.4	
16/10/2023	05:07:20	MCW-B-ST10	Still	MCW-B-ST10_12	796	-	652 120.3	6 222 662.4	652 096.3	6 222 631.0	39.4	
16/10/2023	05:09:40	MCW-B-ST10	Video	EOL	797	-	652 120.3	6 222 662.4	652 088.1	6 222 619.8	53.3	
16/10/2023	05:25:42	MCW-B-ST10	DVV	PC/FA	798	104	652 120.3	6 222 662.4	652 119.2	6 222 662.8	1.1	
16/10/2023	06:27:57	MCW-B-ST09A	Video	SOL	799	104	650 065.9	6 222 892.3	650 116.9	6 222 911.4	54.4	
16/10/2023	06:31:50	MCW-B-ST09A	Still	MCW-B-ST09A_01	803	-	650 065.9	6 222 892.3	650 100.0	6 222 905.5	36.6	
16/10/2023	06:32:35	MCW-B-ST09A	Still	MCW-B-ST09A_02	804	-	650 065.9	6 222 892.3	650 095.3	6 222 903.3	31.3	
16/10/2023	06:33:08	MCW-B-ST09A	Still	MCW-B-ST09A_03	805	-	650 065.9	6 222 892.3	650 092.3	6 222 901.9	28.1	
16/10/2023	06:33:22	MCW-B-ST09A	Still	MCW-B-ST09A_04	806	-	650 065.9	6 222 892.3	650 090.9	6 222 901.3	26.5	
16/10/2023	06:33:38	MCW-B-ST09A	Still	MCW-B-ST09A_05	807	-	650 065.9	6 222 892.3	650 089.3	6 222 901.0	24.9	
16/10/2023	06:34:32	MCW-B-ST09A	Still	MCW-B-ST09A_06	808	-	650 065.9	6 222 892.3	650 084.1	6 222 898.7	19.3	
16/10/2023	06:36:32	MCW-B-ST09A	Still	MCW-B-ST09A_07	809	-	650 065.9	6 222 892.3	650 072.4	6 222 893.9	6.6	
16/10/2023	06:38:06	MCW-B-ST09A	Still	MCW-B-ST09A_08	810	-	650 065.9	6 222 892.3	650 063.1	6 222 890.5	3.3	
16/10/2023	06:39:29	MCW-B-ST09A	Still	MCW-B-ST09A_09	811	-	650 065.9	6 222 892.3	650 054.8	6 222 887.8	12.0	
16/10/2023	06:41:13	MCW-B-ST09A	Still	MCW-B-ST09A_10	812	-	650 065.9	6 222 892.3	650 045.2	6 222 884.3	22.2	
16/10/2023	06:41:27	MCW-B-ST09A	Still	MCW-B-ST09A_11	813	-	650 065.9	6 222 892.3	650 044.3	6 222 883.5	23.4	
16/10/2023	06:42:20	MCW-B-ST09A	Still	MCW-B-ST09A_12	814	-	650 065.9	6 222 892.3	650 039.3	6 222 881.2	28.8	
16/10/2023	06:43:33	MCW-B-ST09A	Still	MCW-B-ST09A_13	815	-	650 065.9	6 222 892.3	650 032.1	6 222 877.9	36.7	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
16/10/2023	06:44:19	MCW-B-ST09A	Still	MCW-B-ST09A_14	816	-	650 065.9	6 222 892.3	650 027.9	6 222 876.5	41.2	
16/10/2023	06:44:32	MCW-B-ST09A	Still	MCW-B-ST09A_15	817	-	650 065.9	6 222 892.3	650 026.8	6 222 876.0	42.4	
16/10/2023	06:46:14	MCW-B-ST09A	Still	MCW-B-ST09A_16	818	-	650 065.9	6 222 892.3	650 017.3	6 222 872.0	52.7	
16/10/2023	06:47:23	MCW-B-ST09A	Video	EOL	819	-	650 065.9	6 222 892.3	650 013.4	6 222 871.7	56.4	
16/10/2023	07:07:21	MCW-B-ST09A	DVV	PC/FA	820	62	650 065.9	6 222 892.3	650 065.7	6 222 890.7	1.7	
17/10/2023	01:53:21	MCW-D-ST103A	Video	SOL	821	62	641 665.6	6 193 656.0	641 624.2	6 193 696.8	58.1	
17/10/2023	01:53:21	MCW-D-ST103A	Still	MCW-D-ST103A_01	821	62	641 665.6	6 193 656.0	641 624.2	6 193 696.8	58.1	
17/10/2023	01:54:50	MCW-D-ST103A	Still	MCW-D-ST103A_02	822	-	641 665.6	6 193 656.0	641 625.1	6 193 695.3	56.4	
17/10/2023	01:57:38	MCW-D-ST103A	Still	MCW-D-ST103A_03	823	-	641 665.6	6 193 656.0	641 637.2	6 193 684.5	40.2	
17/10/2023	01:58:27	MCW-D-ST103A	Still	MCW-D-ST103A_04	824	-	641 665.6	6 193 656.0	641 640.7	6 193 680.3	34.7	
17/10/2023	02:00:53	MCW-D-ST103A	Still	MCW-D-ST103A_05	825	-	641 665.6	6 193 656.0	641 650.9	6 193 670.4	20.5	
17/10/2023	02:04:04	MCW-D-ST103A	Still	MCW-D-ST103A_06	826	-	641 665.6	6 193 656.0	641 665.2	6 193 655.6	0.6	
17/10/2023	02:06:31	MCW-D-ST103A	Still	MCW-D-ST103A_07	827	-	641 665.6	6 193 656.0	641 676.0	6 193 645.6	14.8	
17/10/2023	02:10:02	MCW-D-ST103A	Still	MCW-D-ST103A_08	828	-	641 665.6	6 193 656.0	641 691.7	6 193 631.4	35.8	
17/10/2023	02:13:40	MCW-D-ST103A	Video	EOL	830	-	641 665.6	6 193 656.0	641 705.5	6 193 616.9	55.9	
17/10/2023	02:37:14	MCW-D-ST103A	DVV	PC/FA	831	59	641 665.6	6 193 656.0	641 665.7	6 193 658.6	2.6	
17/10/2023	04:24:42	MCW-D-ST100A	Video	SOL	832	59	645 921.0	6 197 226.7	645 937.3	6 197 289.8	65.2	
17/10/2023	04:28:02	MCW-D-ST100A	Still	MCW-D-ST100A_01	833	-	645 921.0	6 197 226.7	645 933.6	6 197 274.7	49.7	
17/10/2023	04:29:16	MCW-D-ST100A	Still	MCW-D-ST100A_02	834	-	645 921.0	6 197 226.7	645 932.1	6 197 266.9	41.7	
17/10/2023	04:30:47	MCW-D-ST100A	Still	MCW-D-ST100A_03	835	-	645 921.0	6 197 226.7	645 929.6	6 197 257.1	31.6	
17/10/2023	04:32:07	MCW-D-ST100A	Still	MCW-D-ST100A_04	836	-	645 921.0	6 197 226.7	645 928.5	6 197 250.1	24.6	
17/10/2023	04:33:33	MCW-D-ST100A	Still	MCW-D-ST100A_05	837	-	645 921.0	6 197 226.7	645 925.8	6 197 241.6	15.6	
17/10/2023	04:34:35	MCW-D-ST100A	Still	MCW-D-ST100A_06	838	-	645 921.0	6 197 226.7	645 923.7	6 197 234.9	8.7	
17/10/2023	04:36:02	MCW-D-ST100A	Still	MCW-D-ST100A_07	839	-	645 921.0	6 197 226.7	645 922.2	6 197 225.4	1.8	
17/10/2023	04:39:17	MCW-D-ST100A	Still	MCW-D-ST100A_08	840	-	645 921.0	6 197 226.7	645 916.4	6 197 207.4	19.9	
17/10/2023	04:42:26	MCW-D-ST100A	Still	MCW-D-ST100A_09	841	-	645 921.0	6 197 226.7	645 911.0	6 197 187.7	40.3	
17/10/2023	04:44:04	MCW-D-ST100A	Still	MCW-D-ST100A_10	842	-	645 921.0	6 197 226.7	645 909.5	6 197 177.0	51.1	
17/10/2023	04:45:10	MCW-D-ST100A	Video	EOL	843	-	645 921.0	6 197 226.7	645 907.9	6 197 174.1	54.3	
17/10/2023	05:11:44	MCW-D-ST100A	WS	TOP	846	5	645 921.0	6 197 226.7	645 921.0	6 197 227.0	0.3	
17/10/2023	05:21:08	MCW-D-ST100A	WS	BOT	847	54	645 921.0	6 197 226.7	645 922.9	6 197 230.8	4.5	
17/10/2023	05:42:46	MCW-D-ST100A	DVV	PC/FA	848	55	645 921.0	6 197 226.7	645 921.9	6 197 226.4	1.0	
22/10/2023	21:18:09	MCW-D-ST64	Video	SOL	849	55	656 984.8	6 209 773.9	656 999.0	6 209 828.9	56.8	
22/10/2023	21:18:35	MCW-D-ST64	Still	MCW-D-ST64_01	850	-	656 984.8	6 209 773.9	656 999.3	6 209 827.5	55.6	
22/10/2023	21:19:35	MCW-D-ST64	Still	MCW-D-ST64_02	851	-	656 984.8	6 209 773.9	656 998.3	6 209 821.1	49.2	
22/10/2023	21:20:34	MCW-D-ST64	Still	MCW-D-ST64_03	852	-	656 984.8	6 209 773.9	656 996.9	6 209 815.1	43.0	
22/10/2023	21:21:14	MCW-D-ST64	Still	MCW-D-ST64_04	853	-	656 984.8	6 209 773.9	656 995.8	6 209 811.8	39.5	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
22/10/2023	21:21:51	MCW-D-ST64	Still	MCW-D-ST64_05	854	-	656 984.8	6 209 773.9	656 994.6	6 209 807.7	35.3	
22/10/2023	21:22:43	MCW-D-ST64	Still	MCW-D-ST64_06	855	-	656 984.8	6 209 773.9	656 993.6	6 209 802.3	29.8	
22/10/2023	21:23:36	MCW-D-ST64	Still	MCW-D-ST64_07	856	-	656 984.8	6 209 773.9	656 991.9	6 209 797.5	24.7	
22/10/2023	21:24:46	MCW-D-ST64	Still	MCW-D-ST64_08	857	-	656 984.8	6 209 773.9	656 989.8	6 209 790.5	17.4	
22/10/2023	21:25:41	MCW-D-ST64	Still	MCW-D-ST64_09	858	-	656 984.8	6 209 773.9	656 987.9	6 209 786.0	12.6	
22/10/2023	21:26:16	MCW-D-ST64	Still	MCW-D-ST64_10	859	-	656 984.8	6 209 773.9	656 987.2	6 209 781.5	8.0	
22/10/2023	21:27:00	MCW-D-ST64	Still	MCW-D-ST64_11	860	-	656 984.8	6 209 773.9	656 985.9	6 209 776.6	3.0	
22/10/2023	21:28:06	MCW-D-ST64	Still	MCW-D-ST64_12	861	-	656 984.8	6 209 773.9	656 984.1	6 209 770.5	3.4	
22/10/2023	21:29:10	MCW-D-ST64	Still	MCW-D-ST64_13	862	-	656 984.8	6 209 773.9	656 982.6	6 209 764.1	10.0	
22/10/2023	21:30:01	MCW-D-ST64	Still	MCW-D-ST64_14	863	-	656 984.8	6 209 773.9	656 980.7	6 209 759.0	15.4	
22/10/2023	21:30:33	MCW-D-ST64	Still	MCW-D-ST64_15	864	-	656 984.8	6 209 773.9	656 979.8	6 209 756.2	18.3	
22/10/2023	21:31:26	MCW-D-ST64	Still	MCW-D-ST64_16	865	-	656 984.8	6 209 773.9	656 978.4	6 209 751.1	23.7	
22/10/2023	21:31:58	MCW-D-ST64	Still	MCW-D-ST64_17	866	-	656 984.8	6 209 773.9	656 977.5	6 209 748.0	26.8	
22/10/2023	21:33:07	MCW-D-ST64	Still	MCW-D-ST64_18	867	-	656 984.8	6 209 773.9	656 975.4	6 209 740.7	34.4	
22/10/2023	21:33:34	MCW-D-ST64	Still	MCW-D-ST64_19	868	-	656 984.8	6 209 773.9	656 974.5	6 209 738.2	37.1	
22/10/2023	21:34:35	MCW-D-ST64	Still	MCW-D-ST64_20	869	-	656 984.8	6 209 773.9	656 972.8	6 209 732.2	43.3	
22/10/2023	21:35:16	MCW-D-ST64	Still	MCW-D-ST64_21	870	-	656 984.8	6 209 773.9	656 971.6	6 209 728.5	47.2	
22/10/2023	21:35:48	MCW-D-ST64	Still	MCW-D-ST64_22	871	-	656 984.8	6 209 773.9	656 970.9	6 209 724.6	51.1	
22/10/2023	21:35:58	MCW-D-ST64	Video	EOL	872	-	656 984.8	6 209 773.9	656 970.7	6 209 723.5	52.2	
22/10/2023	22:00:26	MCW-D-ST64	DVV	PC/FA	873	56	656 984.8	6 209 773.9	656 987.4	6 209 777.4	4.4	
22/10/2023	23:18:28	MCW-D-ST72A	Video	SOL	874	56	654 833.7	6 206 663.5	654 858.7	6 206 718.0	59.9	
22/10/2023	23:21:21	MCW-D-ST72A	Still	MCW-D-ST72_01	875	-	654 833.7	6 206 663.5	654 854.3	6 206 707.4	48.4	
22/10/2023	23:23:00	MCW-D-ST72A	Still	MCW-D-ST72_02	876	-	654 833.7	6 206 663.5	654 851.0	6 206 698.3	38.9	
22/10/2023	23:23:43	MCW-D-ST72A	Still	MCW-D-ST72_03	877	-	654 833.7	6 206 663.5	654 848.8	6 206 694.1	34.1	
22/10/2023	23:24:50	MCW-D-ST72A	Still	MCW-D-ST72_04	878	-	654 833.7	6 206 663.5	654 846.5	6 206 687.8	27.4	
22/10/2023	23:25:17	MCW-D-ST72A	Still	MCW-D-ST72_05	879	-	654 833.7	6 206 663.5	654 845.5	6 206 685.4	24.8	
22/10/2023	23:25:52	MCW-D-ST72A	Still	MCW-D-ST72_06	880	-	654 833.7	6 206 663.5	654 843.9	6 206 682.1	21.2	
22/10/2023	23:28:46	MCW-D-ST72A	Still	MCW-D-ST72_07	881	-	654 833.7	6 206 663.5	654 835.8	6 206 665.6	3.0	
22/10/2023	23:29:36	MCW-D-ST72A	Still	MCW-D-ST72_08	882	-	654 833.7	6 206 663.5	654 834.1	6 206 660.7	2.8	
22/10/2023	23:30:29	MCW-D-ST72A	Still	MCW-D-ST72_09	883	-	654 833.7	6 206 663.5	654 831.6	6 206 655.2	8.6	
22/10/2023	23:32:17	MCW-D-ST72A	Still	MCW-D-ST72_10	884	-	654 833.7	6 206 663.5	654 828.3	6 206 646.1	18.2	
22/10/2023	23:34:29	MCW-D-ST72A	Still	MCW-D-ST72_11	885	-	654 833.7	6 206 663.5	654 822.7	6 206 632.9	32.6	
22/10/2023	23:35:54	MCW-D-ST72A	Still	MCW-D-ST72_12	886	-	654 833.7	6 206 663.5	654 819.3	6 206 625.3	40.8	
22/10/2023	00:01:51	MCW-D-ST72A	Video	EOL	888	-	654 833.7	6 206 663.5	654 836.8	6 206 665.3	3.5	
22/10/2023	00:19:10	MCW-D-ST72A	DVV	PC/FA	889	59	654 833.7	6 206 663.5	654 836.2	6 206 664.3	2.6	
23/10/2023	01:11:02	MCW-D-ST81	Video	SOL	890	59	654 411.2	6 204 350.8	654 425.3	6 204 405.4	56.4	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
23/10/2023	01:12:51	MCW-D-ST81	Still	MCW-D-ST81_01	891	-	654 411.2	6 204 350.8	654 424.5	6 204 399.2	50.1	
23/10/2023	01:14:23	MCW-D-ST81	Still	MCW-D-ST81_02	892	-	654 411.2	6 204 350.8	654 422.5	6 204 389.4	40.2	
23/10/2023	01:15:49	MCW-D-ST81	Still	MCW-D-ST81_03	893	-	654 411.2	6 204 350.8	654 420.6	6 204 381.0	31.7	
23/10/2023	01:16:53	MCW-D-ST81	Still	MCW-D-ST81_04	894	-	654 411.2	6 204 350.8	654 419.5	6 204 375.0	25.6	
23/10/2023	01:19:44	MCW-D-ST81	Still	MCW-D-ST81_05	895	-	654 411.2	6 204 350.8	654 414.8	6 204 357.7	7.7	
23/10/2023	01:20:49	MCW-D-ST81	Still	MCW-D-ST81_06	896	-	654 411.2	6 204 350.8	654 413.4	6 204 351.0	2.3	
23/10/2023	01:22:16	MCW-D-ST81	Still	MCW-D-ST81_07	897	-	654 411.2	6 204 350.8	654 411.3	6 204 342.0	8.8	
23/10/2023	01:23:58	MCW-D-ST81	Still	MCW-D-ST81_08	898	-	654 411.2	6 204 350.8	654 408.7	6 204 332.3	18.7	
23/10/2023	01:27:18	MCW-D-ST81	Still	MCW-D-ST81_09	899	-	654 411.2	6 204 350.8	654 404.2	6 204 311.5	39.9	
23/10/2023	01:28:59	MCW-D-ST81	Still	MCW-D-ST81_10	900	-	654 411.2	6 204 350.8	654 402.3	6 204 301.7	49.9	
23/10/2023	01:29:56	MCW-D-ST81	Video	EOL	901	-	654 411.2	6 204 350.8	654 400.9	6 204 296.4	55.4	
23/10/2023	01:59:31	MCW-D-ST81	DVV	PC/FA	902	55	654 411.2	6 204 350.8	654 413.7	6 204 349.9	2.7	
23/10/2023	02:59:14	MCW-D-ST80	Video	SOL	904	55	651 997.4	6 204 283.6	651 951.8	6 204 318.1	57.2	
23/10/2023	03:00:31	MCW-D-ST80	Still	MCW-D-ST80_01	905	-	651 997.4	6 204 283.6	651 953.4	6 204 315.3	54.3	
23/10/2023	03:02:31	MCW-D-ST80	Still	MCW-D-ST80_02	906	-	651 997.4	6 204 283.6	651 963.7	6 204 308.4	41.8	
23/10/2023	03:03:16	MCW-D-ST80	Still	MCW-D-ST80_03	907	-	651 997.4	6 204 283.6	651 968.3	6 204 305.6	36.5	
23/10/2023	03:03:49	MCW-D-ST80	Still	MCW-D-ST80_04	908	-	651 997.4	6 204 283.6	651 971.8	6 204 303.8	32.6	
23/10/2023	03:04:23	MCW-D-ST80	Still	MCW-D-ST80_05	909	-	651 997.4	6 204 283.6	651 973.9	6 204 301.9	29.8	
23/10/2023	03:05:08	MCW-D-ST80	Still	MCW-D-ST80_06	910	-	651 997.4	6 204 283.6	651 978.0	6 204 299.6	25.2	
23/10/2023	03:07:28	MCW-D-ST80	Still	MCW-D-ST80_07	911	-	651 997.4	6 204 283.6	651 989.7	6 204 291.2	10.8	
23/10/2023	03:09:42	MCW-D-ST80	Still	MCW-D-ST80_08	912	-	651 997.4	6 204 283.6	652 000.8	6 204 282.2	3.7	
23/10/2023	03:11:16	MCW-D-ST80	Still	MCW-D-ST80_09	913	-	651 997.4	6 204 283.6	652 009.0	6 204 276.7	13.5	
23/10/2023	03:12:39	MCW-D-ST80	Still	MCW-D-ST80_10	914	-	651 997.4	6 204 283.6	652 015.9	6 204 272.1	21.8	
23/10/2023	03:13:38	MCW-D-ST80	Still	MCW-D-ST80_11	915	-	651 997.4	6 204 283.6	652 020.5	6 204 268.5	27.6	
23/10/2023	03:14:22	MCW-D-ST80	Still	MCW-D-ST80_12	916	-	651 997.4	6 204 283.6	652 023.6	6 204 265.3	31.9	
23/10/2023	03:15:34	MCW-D-ST80	Still	MCW-D-ST80_13	917	-	651 997.4	6 204 283.6	652 030.0	6 204 261.5	39.4	
23/10/2023	03:16:52	MCW-D-ST80	Still	MCW-D-ST80_14	918	-	651 997.4	6 204 283.6	652 036.8	6 204 256.5	47.8	
23/10/2023	03:34:00	MCW-D-ST80	Video	EOL	920	-	651 997.4	6 204 283.6	651 997.1	6 204 284.6	1.1	
23/10/2023	03:43:47	MCW-D-ST80	WS	TOP	921	5	651 997.4	6 204 283.6	651 997.7	6 204 285.1	1.5	
23/10/2023	03:57:24	MCW-D-ST80	WS	BOT	922	50	651 997.4	6 204 283.6	651 998.3	6 204 285.0	1.7	
23/10/2023	04:31:45	MCW-D-ST80	DVV	PC/FA	923	53	651 997.4	6 204 283.6	651 998.0	6 204 285.9	2.4	
23/10/2023	05:57:24	MCW-D-ST86A	Video	SOL	924	53	647 336.7	6 201 678.2	647 290.7	6 201 713.3	57.8	
23/10/2023	06:03:02	MCW-D-ST86A	Still	MCW-D-ST86A_01	925	-	647 336.7	6 201 678.2	647 312.9	6 201 699.0	31.6	
23/10/2023	06:04:19	MCW-D-ST86A	Still	MCW-D-ST86A_02	926	-	647 336.7	6 201 678.2	647 318.9	6 201 692.8	23.0	
23/10/2023	06:05:20	MCW-D-ST86A	Still	MCW-D-ST86A_03	927	-	647 336.7	6 201 678.2	647 323.8	6 201 688.9	16.8	
23/10/2023	06:06:42	MCW-D-ST86A	Still	MCW-D-ST86A_04	928	-	647 336.7	6 201 678.2	647 330.5	6 201 683.2	8.0	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
23/10/2023	06:08:10	MCW-D-ST86A	Still	MCW-D-ST86A_05	929	-	647 336.7	6 201 678.2	647 337.5	6 201 679.6	1.6	
23/10/2023	06:11:11	MCW-D-ST86A	Still	MCW-D-ST86A_06	930	-	647 336.7	6 201 678.2	647 352.2	6 201 667.8	18.6	
23/10/2023	06:13:15	MCW-D-ST86A	Still	MCW-D-ST86A_07	931	-	647 336.7	6 201 678.2	647 361.9	6 201 659.9	31.2	
23/10/2023	06:14:56	MCW-D-ST86A	Still	MCW-D-ST86A_08	932	-	647 336.7	6 201 678.2	647 372.6	6 201 654.1	43.3	
23/10/2023	06:15:50	MCW-D-ST86A	Still	MCW-D-ST86A_09	933	-	647 336.7	6 201 678.2	647 377.0	6 201 650.5	48.9	
23/10/2023	06:16:12	MCW-D-ST86A	Still	MCW-D-ST86A_10	934	-	647 336.7	6 201 678.2	647 378.4	6 201 648.9	51.0	
23/10/2023	06:16:53	MCW-D-ST86A	Video	EOL	935	-	647 336.7	6 201 678.2	647 380.9	6 201 645.6	54.9	
23/10/2023	06:37:24	MCW-D-ST86A	WS	TOP	936	5	647 336.7	6 201 678.2	647 337.3	6 201 679.9	1.8	
23/10/2023	06:46:20	MCW-D-ST86A	WS	BOT	937	48	647 336.7	6 201 678.2	647 339.1	6 201 681.7	4.2	
23/10/2023	06:58:28	MCW-D-ST86A	DVV	PC	938	60	647 336.7	6 201 678.2	647 338.8	6 201 682.3	4.7	
23/10/2023	08:21:33	MCW-D-ST104	Video	SOL	939	60	643 738.1	6 193 436.9	643 705.4	6 193 486.8	59.6	
23/10/2023	08:23:25	MCW-D-ST104	Still	MCW-D-ST104_01	940	-	643 738.1	6 193 436.9	643 709.3	6 193 481.1	52.7	
23/10/2023	08:23:53	MCW-D-ST104	Still	MCW-D-ST104_02	941	-	643 738.1	6 193 436.9	643 711.1	6 193 479.5	50.4	
23/10/2023	08:25:00	MCW-D-ST104	Still	MCW-D-ST104_03	942	-	643 738.1	6 193 436.9	643 714.4	6 193 472.4	42.6	
23/10/2023	08:26:31	MCW-D-ST104	Still	MCW-D-ST104_04	943	-	643 738.1	6 193 436.9	643 720.0	6 193 466.4	34.6	
23/10/2023	08:27:26	MCW-D-ST104	Still	MCW-D-ST104_05	944	-	643 738.1	6 193 436.9	643 722.6	6 193 460.5	28.2	
23/10/2023	08:28:22	MCW-D-ST104	Still	MCW-D-ST104_06	945	-	643 738.1	6 193 436.9	643 726.6	6 193 455.4	21.7	
23/10/2023	08:29:39	MCW-D-ST104	Still	MCW-D-ST104_07	946	-	643 738.1	6 193 436.9	643 731.3	6 193 448.9	13.7	
23/10/2023	08:31:08	MCW-D-ST104	Still	MCW-D-ST104_08	947	-	643 738.1	6 193 436.9	643 736.1	6 193 440.8	4.4	
23/10/2023	08:31:49	MCW-D-ST104	Still	MCW-D-ST104_09	948	-	643 738.1	6 193 436.9	643 738.0	6 193 437.8	0.9	
23/10/2023	08:33:15	MCW-D-ST104	Still	MCW-D-ST104_10	949	-	643 738.1	6 193 436.9	643 742.9	6 193 430.3	8.2	
23/10/2023	08:35:07	MCW-D-ST104	Still	MCW-D-ST104_11	950	-	643 738.1	6 193 436.9	643 750.8	6 193 421.3	20.1	
23/10/2023	08:36:33	MCW-D-ST104	Still	MCW-D-ST104_12	951	-	643 738.1	6 193 436.9	643 755.6	6 193 415.4	27.8	
23/10/2023	08:38:21	MCW-D-ST104	Still	MCW-D-ST104_13	952	-	643 738.1	6 193 436.9	643 760.6	6 193 404.3	39.7	
23/10/2023	08:40:39	MCW-D-ST104	Video	EOL	953	-	643 738.1	6 193 436.9	643 769.5	6 193 392.5	54.4	
23/10/2023	09:00:30	MCW-D-ST104	WS	NS	954	-	643 738.1	6 193 436.9	643 738.7	6 193 438.1	1.3	
23/10/2023	09:08:57	MCW-D-ST104	WS	TOP	957	5	643 738.1	6 193 436.9	643 736.8	6 193 438.6	2.1	
23/10/2023	09:16:03	MCW-D-ST104	WS	BOT	958	55	643 738.1	6 193 436.9	643 737.7	6 193 446.4	9.4	
23/10/2023	09:32:40	MCW-D-ST104	DVV	NS	959	60	643 738.1	6 193 436.9	643 738.7	6 193 437.7	1.0	
23/10/2023	09:56:26	MCW-D-ST104	DVV	PC	960	49	643 738.1	6 193 436.9	643 738.4	6 193 432.4	4.6	
23/10/2023	11:11:25	MCW-D-ST108A	Video	SOL	961	49	646 225.7	6 191 608.1	646 195.7	6 191 655.2	55.9	
23/10/2023	11:11:43	MCW-D-ST108A	Still	MCW-D-ST108A_01	962	-	646 225.7	6 191 608.1	646 196.3	6 191 654.5	54.9	
23/10/2023	11:12:40	MCW-D-ST108A	Still	MCW-D-ST108A_02	963	-	646 225.7	6 191 608.1	646 199.5	6 191 649.1	48.6	
23/10/2023	11:13:33	MCW-D-ST108A	Still	MCW-D-ST108A_03	964	-	646 225.7	6 191 608.1	646 202.2	6 191 644.9	43.7	
23/10/2023	11:14:04	MCW-D-ST108A	Still	MCW-D-ST108A_04	965	-	646 225.7	6 191 608.1	646 204.2	6 191 641.7	39.9	
23/10/2023	11:14:49	MCW-D-ST108A	Still	MCW-D-ST108A_05	966	-	646 225.7	6 191 608.1	646 206.3	6 191 636.4	34.3	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
23/10/2023	11:15:38	MCW-D-ST108A	Still	MCW-D-ST108A_06	967	-	646 225.7	6 191 608.1	646 208.9	6 191 632.9	30.0	
23/10/2023	11:16:54	MCW-D-ST108A	Still	MCW-D-ST108A_07	968	-	646 225.7	6 191 608.1	646 214.5	6 191 628.2	23.0	
23/10/2023	11:17:31	MCW-D-ST108A	Still	MCW-D-ST108A_08	969	-	646 225.7	6 191 608.1	646 215.4	6 191 623.6	18.6	
23/10/2023	11:18:27	MCW-D-ST108A	Still	MCW-D-ST108A_09	970	-	646 225.7	6 191 608.1	646 218.1	6 191 618.2	12.6	
23/10/2023	11:19:12	MCW-D-ST108A	Still	MCW-D-ST108A_10	971	-	646 225.7	6 191 608.1	646 220.5	6 191 614.7	8.4	
23/10/2023	11:19:54	MCW-D-ST108A	Still	MCW-D-ST108A_11	972	-	646 225.7	6 191 608.1	646 221.9	6 191 610.6	4.6	
23/10/2023	11:20:31	MCW-D-ST108A	Still	MCW-D-ST108A_12	973	-	646 225.7	6 191 608.1	646 225.5	6 191 608.2	0.2	
23/10/2023	11:21:27	MCW-D-ST108A	Still	MCW-D-ST108A_13	974	-	646 225.7	6 191 608.1	646 229.5	6 191 604.1	5.5	
23/10/2023	11:22:26	MCW-D-ST108A	Still	MCW-D-ST108A_14	975	-	646 225.7	6 191 608.1	646 232.9	6 191 598.9	11.7	
23/10/2023	11:23:19	MCW-D-ST108A	Still	MCW-D-ST108A_15	976	-	646 225.7	6 191 608.1	646 235.2	6 191 592.9	17.9	
23/10/2023	11:24:13	MCW-D-ST108A	Still	MCW-D-ST108A_16	977	-	646 225.7	6 191 608.1	646 236.6	6 191 587.1	23.7	
23/10/2023	11:25:03	MCW-D-ST108A	Still	MCW-D-ST108A_17	978	-	646 225.7	6 191 608.1	646 241.0	6 191 584.7	28.0	
23/10/2023	11:26:21	MCW-D-ST108A	Still	MCW-D-ST108A_18	979	-	646 225.7	6 191 608.1	646 245.4	6 191 576.8	36.9	
23/10/2023	11:27:23	MCW-D-ST108A	Still	MCW-D-ST108A_19	980	-	646 225.7	6 191 608.1	646 248.3	6 191 572.0	42.6	
23/10/2023	11:27:43	MCW-D-ST108A	Still	MCW-D-ST108A_20	981	-	646 225.7	6 191 608.1	646 249.8	6 191 570.3	44.9	
23/10/2023	11:28:27	MCW-D-ST108A	Still	MCW-D-ST108A_21	982	-	646 225.7	6 191 608.1	646 251.9	6 191 565.8	49.7	
23/10/2023	11:28:40	MCW-D-ST108A	Video	EOL	983	-	646 225.7	6 191 608.1	646 252.3	6 191 564.2	51.3	
23/10/2023	11:54:54	MCW-D-ST108A	WS	TOP	984	5	646 225.7	6 191 608.1	646 228.2	6 191 609.5	2.8	
23/10/2023	12:02:35	MCW-D-ST108A	WS	BOT	985	44	646 225.7	6 191 608.1	646 229.0	6 191 611.0	4.4	
23/10/2023	12:41:59	MCW-D-ST108A	HG	PC	986	58	646 225.7	6 191 608.1	646 226.1	6 191 608.6	0.6	
23/10/2023	14:05:31	MCW-D-ST101	Video	SOL	987	58	649 576.3	6 196 377.7	649 522.9	6 196 386.5	54.1	
23/10/2023	14:05:47	MCW-D-ST101	Still	MCW-D-ST101_01	988	-	649 576.3	6 196 377.7	649 524.1	6 196 386.1	52.9	
23/10/2023	14:07:13	MCW-D-ST101	Still	MCW-D-ST101_02	989	-	649 576.3	6 196 377.7	649 532.2	6 196 384.5	44.6	
23/10/2023	14:08:13	MCW-D-ST101	Still	MCW-D-ST101_03	990	-	649 576.3	6 196 377.7	649 538.3	6 196 383.2	38.4	
23/10/2023	14:08:47	MCW-D-ST101	Still	MCW-D-ST101_04	991	-	649 576.3	6 196 377.7	649 541.7	6 196 382.2	34.9	
23/10/2023	14:09:10	MCW-D-ST101	Still	MCW-D-ST101_05	992	-	649 576.3	6 196 377.7	649 544.6	6 196 382.0	31.9	
23/10/2023	14:09:43	MCW-D-ST101	Still	MCW-D-ST101_06	993	-	649 576.3	6 196 377.7	649 547.7	6 196 381.3	28.8	
23/10/2023	14:10:33	MCW-D-ST101	Still	MCW-D-ST101_07	994	-	649 576.3	6 196 377.7	649 553.4	6 196 380.8	23.1	
23/10/2023	14:11:27	MCW-D-ST101	Still	MCW-D-ST101_08	995	-	649 576.3	6 196 377.7	649 558.2	6 196 379.1	18.1	
23/10/2023	14:12:27	MCW-D-ST101	Still	MCW-D-ST101_09	996	-	649 576.3	6 196 377.7	649 564.2	6 196 378.3	12.1	
23/10/2023	14:13:39	MCW-D-ST101	Still	MCW-D-ST101_10	997	-	649 576.3	6 196 377.7	649 571.4	6 196 377.6	4.9	
23/10/2023	14:14:02	MCW-D-ST101	Still	MCW-D-ST101_11	998	-	649 576.3	6 196 377.7	649 573.8	6 196 377.4	2.5	
23/10/2023	14:15:00	MCW-D-ST101	Still	MCW-D-ST101_12	999	-	649 576.3	6 196 377.7	649 580.2	6 196 375.8	4.4	
23/10/2023	14:15:59	MCW-D-ST101	Still	MCW-D-ST101_13	1000	-	649 576.3	6 196 377.7	649 586.5	6 196 374.6	10.7	
23/10/2023	14:17:06	MCW-D-ST101	Still	MCW-D-ST101_14	1001	-	649 576.3	6 196 377.7	649 593.5	6 196 373.3	17.7	
23/10/2023	14:18:30	MCW-D-ST101	Still	MCW-D-ST101_15	1002	-	649 576.3	6 196 377.7	649 602.1	6 196 372.6	26.3	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
23/10/2023	14:19:38	MCW-D-ST101	Still	MCW-D-ST101_16	1003	-	649 576.3	6 196 377.7	649 608.6	6 196 371.6	32.9	
23/10/2023	14:20:32	MCW-D-ST101	Still	MCW-D-ST101_17	1004	-	649 576.3	6 196 377.7	649 614.0	6 196 371.1	38.2	
23/10/2023	14:21:34	MCW-D-ST101	Still	MCW-D-ST101_18	1005	-	649 576.3	6 196 377.7	649 620.5	6 196 369.7	45.0	
23/10/2023	14:22:49	MCW-D-ST101	Video	EOL	1006	-	649 576.3	6 196 377.7	649 628.7	6 196 367.7	53.3	
23/10/2023	14:40:34	MCW-D-ST101	DVV	PC/FA	1007	52	649 576.3	6 196 377.7	649 575.3	6 196 376.7	1.4	
23/10/2023	15:37:04	MCW-D-ST95A	Video	SOL	1008	52	649 709.0	6 198 447.1	649 710.1	6 198 504.1	57.0	
23/10/2023	15:37:22	MCW-D-ST95A	Still	MCW-D-ST95A_01	1009	-	649 709.0	6 198 447.1	649 709.8	6 198 502.5	55.4	
23/10/2023	15:38:33	MCW-D-ST95A	Still	MCW-D-ST95A_02	1010	-	649 709.0	6 198 447.1	649 710.6	6 198 497.6	50.5	
23/10/2023	15:39:38	MCW-D-ST95A	Still	MCW-D-ST95A_03	1011	-	649 709.0	6 198 447.1	649 710.1	6 198 491.6	44.5	
23/10/2023	15:40:40	MCW-D-ST95A	Still	MCW-D-ST95A_04	1012	-	649 709.0	6 198 447.1	649 710.3	6 198 485.5	38.3	
23/10/2023	15:41:42	MCW-D-ST95A	Still	MCW-D-ST95A_05	1013	-	649 709.0	6 198 447.1	649 710.2	6 198 478.5	31.4	
23/10/2023	15:42:36	MCW-D-ST95A	Still	MCW-D-ST95A_06	1014	-	649 709.0	6 198 447.1	649 710.5	6 198 473.1	26.0	
23/10/2023	15:43:46	MCW-D-ST95A	Still	MCW-D-ST95A_07	1015	-	649 709.0	6 198 447.1	649 710.4	6 198 465.7	18.6	
23/10/2023	15:45:03	MCW-D-ST95A	Still	MCW-D-ST95A_08	1016	-	649 709.0	6 198 447.1	649 710.5	6 198 457.3	10.3	
23/10/2023	15:46:14	MCW-D-ST95A	Still	MCW-D-ST95A_09	1017	-	649 709.0	6 198 447.1	649 710.4	6 198 449.5	2.7	
23/10/2023	15:46:22	MCW-D-ST95A	Still	MCW-D-ST95A_10	1018	-	649 709.0	6 198 447.1	649 710.5	6 198 448.5	2.1	
23/10/2023	15:47:44	MCW-D-ST95A	Still	MCW-D-ST95A_11	1019	-	649 709.0	6 198 447.1	649 709.5	6 198 440.7	6.5	
23/10/2023	15:49:09	MCW-D-ST95A	Still	MCW-D-ST95A_12	1020	-	649 709.0	6 198 447.1	649 709.4	6 198 431.8	15.3	
23/10/2023	15:49:55	MCW-D-ST95A	Still	MCW-D-ST95A_13	1021	-	649 709.0	6 198 447.1	649 710.2	6 198 426.8	20.4	
23/10/2023	15:51:03	MCW-D-ST95A	Still	MCW-D-ST95A_14	1022	-	649 709.0	6 198 447.1	649 708.9	6 198 418.7	28.4	
23/10/2023	15:52:22	MCW-D-ST95A	Still	MCW-D-ST95A_15	1023	-	649 709.0	6 198 447.1	649 709.0	6 198 411.1	36.0	
23/10/2023	15:52:57	MCW-D-ST95A	Still	MCW-D-ST95A_16	1024	-	649 709.0	6 198 447.1	649 709.1	6 198 408.0	39.1	
23/10/2023	15:54:10	MCW-D-ST95A	Still	MCW-D-ST95A_17	1025	-	649 709.0	6 198 447.1	649 709.6	6 198 400.6	46.5	
23/10/2023	15:55:07	MCW-D-ST95A	Video	EOL	1026	-	649 709.0	6 198 447.1	649 709.9	6 198 396.1	51.0	
23/10/2023	16:13:59	MCW-D-ST95A	WS	TOP	1027	5	649 709.0	6 198 447.1	649 708.5	6 198 445.3	1.9	
23/10/2023	16:26:57	MCW-D-ST95A	WS	BOT	1028	47	649 709.0	6 198 447.1	649 707.9	6 198 443.1	4.2	
23/10/2023	16:40:21	MCW-D-ST95A	DVV	PC	1029	58	649 709.0	6 198 447.1	649 709.0	6 198 447.1	0.0	
24/10/2023	07:06:03	MCW-D-ST88A	Video	SOL	1030	58	651 542.8	6 201 944.0	651 487.3	6 201 953.0	56.3	
24/10/2023	07:08:43	MCW-D-ST88A	Still	MCW-D-ST88A_01	1031	-	651 542.8	6 201 944.0	651 496.7	6 201 949.8	46.4	
24/10/2023	07:10:20	MCW-D-ST88A	Still	MCW-D-ST88A_02	1032	-	651 542.8	6 201 944.0	651 505.9	6 201 948.6	37.2	
24/10/2023	07:12:17	MCW-D-ST88A	Still	MCW-D-ST88A_03	1033	-	651 542.8	6 201 944.0	651 518.5	6 201 947.6	24.6	
24/10/2023	07:13:16	MCW-D-ST88A	Still	MCW-D-ST88A_04	1034	-	651 542.8	6 201 944.0	651 524.9	6 201 946.3	18.1	
24/10/2023	07:15:13	MCW-D-ST88A	Still	MCW-D-ST88A_05	1035	-	651 542.8	6 201 944.0	651 536.4	6 201 944.8	6.5	
24/10/2023	07:16:46	MCW-D-ST88A	Still	MCW-D-ST88A_06	1036	-	651 542.8	6 201 944.0	651 545.6	6 201 942.2	3.3	
24/10/2023	07:17:21	MCW-D-ST88A	Still	MCW-D-ST88A_07	1037	-	651 542.8	6 201 944.0	651 548.5	6 201 941.8	6.1	
24/10/2023	07:17:23	MCW-D-ST88A	Still	MCW-D-ST88A_08	1038	-	651 542.8	6 201 944.0	651 549.0	6 201 941.7	6.6	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
24/10/2023	07:20:15	MCW-D-ST88A	Still	MCW-D-ST88A_09	1039	-	651 542.8	6 201 944.0	651 566.9	6 201 939.9	24.5	
24/10/2023	07:21:47	MCW-D-ST88A	Still	MCW-D-ST88A_10	1040	-	651 542.8	6 201 944.0	651 575.8	6 201 937.2	33.7	
24/10/2023	07:21:53	MCW-D-ST88A	Still	MCW-D-ST88A_11	1041	-	651 542.8	6 201 944.0	651 576.7	6 201 937.2	34.5	
24/10/2023	07:23:07	MCW-D-ST88A	Still	MCW-D-ST88A_12	1042	-	651 542.8	6 201 944.0	651 584.3	6 201 936.6	42.1	
24/10/2023	07:24:54	MCW-D-ST88A	Video	EOL	1044	-	651 542.8	6 201 944.0	651 595.3	6 201 934.8	53.3	
24/10/2023	07:45:25	MCW-D-ST88A	DVV	PC/FA	1045	58	651 542.8	6 201 944.0	651 542.2	6 201 946.3	2.4	
24/10/2023	08:29:37	MCW-D-ST89A	Video	SOL	1046	58	654 093.0	6 202 125.7	654 049.1	6 202 156.0	53.4	
24/10/2023	08:32:00	MCW-D-ST89A	Still	MCW-D-ST89A_01	1047	-	654 093.0	6 202 125.7	654 056.3	6 202 150.9	44.5	
24/10/2023	08:33:50	MCW-D-ST89A	Still	MCW-D-ST89A_02	1048	-	654 093.0	6 202 125.7	654 066.5	6 202 144.3	32.3	
24/10/2023	08:35:39	MCW-D-ST89A	Still	MCW-D-ST89A_03	1049	-	654 093.0	6 202 125.7	654 075.6	6 202 138.5	21.6	
24/10/2023	08:37:25	MCW-D-ST89A	Still	MCW-D-ST89A_04	1050	-	654 093.0	6 202 125.7	654 084.2	6 202 131.7	10.6	
24/10/2023	08:38:50	MCW-D-ST89A	Still	MCW-D-ST89A_05	1051	-	654 093.0	6 202 125.7	654 092.2	6 202 126.4	1.0	
24/10/2023	08:40:36	MCW-D-ST89A	Still	MCW-D-ST89A_06	1052	-	654 093.0	6 202 125.7	654 100.3	6 202 120.2	9.2	
24/10/2023	08:43:41	MCW-D-ST89A	Still	MCW-D-ST89A_07	1053	-	654 093.0	6 202 125.7	654 115.9	6 202 109.8	27.9	
24/10/2023	08:46:13	MCW-D-ST89A	Still	MCW-D-ST89A_08	1054	-	654 093.0	6 202 125.7	654 129.3	6 202 099.8	44.6	
24/10/2023	08:47:53	MCW-D-ST89A	Video	EOL	1055	-	654 093.0	6 202 125.7	654 137.3	6 202 095.1	53.9	
24/10/2023	09:05:24	MCW-D-ST89A	DVV	PC/FA	1056	57	654 093.0	6 202 125.7	654 093.6	6 202 127.7	2.0	
24/10/2023	10:16:24	MCW-D-ST82	Video	SOL	1057	57	656 969.8	6 204 539.7	656 829.8	6 204 546.1	140.1	
24/10/2023	10:18:05	MCW-D-ST82	Still	MCW-D-ST82_01	1058	-	656 969.8	6 204 539.7	656 831.4	6 204 545.9	138.5	
24/10/2023	10:18:34	MCW-D-ST82	Still	MCW-D-ST82_02	1059	-	656 969.8	6 204 539.7	656 834.1	6 204 545.1	135.8	
24/10/2023	10:18:49	MCW-D-ST82	Still	MCW-D-ST82_03	1060	-	656 969.8	6 204 539.7	656 835.5	6 204 545.1	134.4	
24/10/2023	10:19:02	MCW-D-ST82	Still	MCW-D-ST82_04	1061	-	656 969.8	6 204 539.7	656 837.2	6 204 544.7	132.6	
24/10/2023	10:19:15	MCW-D-ST82	Still	MCW-D-ST82_05	1062	-	656 969.8	6 204 539.7	656 838.5	6 204 544.6	131.4	
24/10/2023	10:19:26	MCW-D-ST82	Still	MCW-D-ST82_06	1063	-	656 969.8	6 204 539.7	656 840.1	6 204 544.5	129.7	
24/10/2023	10:19:39	MCW-D-ST82	Still	MCW-D-ST82_07	1064	-	656 969.8	6 204 539.7	656 841.4	6 204 544.1	128.5	
24/10/2023	10:20:08	MCW-D-ST82	Still	MCW-D-ST82_08	1065	-	656 969.8	6 204 539.7	656 844.1	6 204 543.8	125.7	
24/10/2023	10:20:29	MCW-D-ST82	Still	MCW-D-ST82_09	1066	-	656 969.8	6 204 539.7	656 846.7	6 204 544.0	123.2	
24/10/2023	10:20:42	MCW-D-ST82	Still	MCW-D-ST82_10	1067	-	656 969.8	6 204 539.7	656 847.9	6 204 544.0	121.9	
24/10/2023	10:21:08	MCW-D-ST82	Still	MCW-D-ST82_11	1068	-	656 969.8	6 204 539.7	656 850.7	6 204 544.7	119.2	
24/10/2023	10:21:26	MCW-D-ST82	Still	MCW-D-ST82_12	1069	-	656 969.8	6 204 539.7	656 852.2	6 204 544.1	117.6	
24/10/2023	10:21:48	MCW-D-ST82	Still	MCW-D-ST82_13	1070	-	656 969.8	6 204 539.7	656 854.4	6 204 543.9	115.4	
24/10/2023	10:21:59	MCW-D-ST82	Still	MCW-D-ST82_14	1071	-	656 969.8	6 204 539.7	656 855.2	6 204 544.0	114.7	
24/10/2023	10:22:40	MCW-D-ST82	Still	MCW-D-ST82_15	1072	-	656 969.8	6 204 539.7	656 860.3	6 204 543.3	109.6	
24/10/2023	10:23:39	MCW-D-ST82	Still	MCW-D-ST82_16	1073	-	656 969.8	6 204 539.7	656 866.2	6 204 543.4	103.6	
24/10/2023	10:24:21	MCW-D-ST82	Still	MCW-D-ST82_17	1074	-	656 969.8	6 204 539.7	656 870.0	6 204 542.3	99.8	
24/10/2023	10:25:40	MCW-D-ST82	Still	MCW-D-ST82_18	1075	-	656 969.8	6 204 539.7	656 878.7	6 204 543.2	91.1	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
24/10/2023	10:26:32	MCW-D-ST82	Still	MCW-D-ST82_19	1076	-	656 969.8	6 204 539.7	656 883.9	6 204 543.0	85.9	
24/10/2023	10:27:35	MCW-D-ST82	Still	MCW-D-ST82_20	1077	-	656 969.8	6 204 539.7	656 890.3	6 204 544.2	79.6	
24/10/2023	10:28:27	MCW-D-ST82	Still	MCW-D-ST82_21	1078	-	656 969.8	6 204 539.7	656 895.5	6 204 543.2	74.4	
24/10/2023	10:29:36	MCW-D-ST82	Still	MCW-D-ST82_22	1079	-	656 969.8	6 204 539.7	656 902.8	6 204 543.0	67.0	
24/10/2023	10:30:39	MCW-D-ST82	Still	MCW-D-ST82_23	1080	-	656 969.8	6 204 539.7	656 909.1	6 204 541.4	60.6	
24/10/2023	10:31:59	MCW-D-ST82	Still	MCW-D-ST82_24	1081	-	656 969.8	6 204 539.7	656 917.3	6 204 541.6	52.5	
24/10/2023	10:33:28	MCW-D-ST82	Still	MCW-D-ST82_25	1082	-	656 969.8	6 204 539.7	656 926.7	6 204 541.4	43.1	
24/10/2023	10:34:10	MCW-D-ST82	Still	MCW-D-ST82_26	1083	-	656 969.8	6 204 539.7	656 931.4	6 204 540.5	38.4	
24/10/2023	10:34:51	MCW-D-ST82	Still	MCW-D-ST82_27	1084	-	656 969.8	6 204 539.7	656 935.7	6 204 540.4	34.1	
24/10/2023	10:36:29	MCW-D-ST82	Still	MCW-D-ST82_28	1085	-	656 969.8	6 204 539.7	656 945.0	6 204 540.0	24.7	
24/10/2023	10:39:11	MCW-D-ST82	Still	MCW-D-ST82_29	1086	-	656 969.8	6 204 539.7	656 961.9	6 204 538.8	7.9	
24/10/2023	10:41:20	MCW-D-ST82	Still	MCW-D-ST82_30	1087	-	656 969.8	6 204 539.7	656 975.7	6 204 538.5	6.1	
24/10/2023	10:42:34	MCW-D-ST82	Still	MCW-D-ST82_31	1088	-	656 969.8	6 204 539.7	656 983.2	6 204 537.6	13.6	
24/10/2023	10:46:28	MCW-D-ST82	Still	MCW-D-ST82_32	1089	-	656 969.8	6 204 539.7	657 001.4	6 204 538.1	31.7	
24/10/2023	10:47:32	MCW-D-ST82	Still	MCW-D-ST82_33	1090	-	656 969.8	6 204 539.7	657 008.2	6 204 536.7	38.6	
24/10/2023	10:48:49	MCW-D-ST82	Still	MCW-D-ST82_34	1091	-	656 969.8	6 204 539.7	657 016.2	6 204 536.6	46.5	
24/10/2023	10:50:06	MCW-D-ST82	Video	EOL	1092	-	656 969.8	6 204 539.7	657 023.8	6 204 536.5	54.1	
24/10/2023	11:16:13	MCW-D-ST82	WS	TOP	1093	5	656 969.8	6 204 539.7	656 968.7	6 204 540.2	1.2	
24/10/2023	11:27:18	MCW-D-ST82	WS	BOT	1094	52	656 969.8	6 204 539.7	656 971.4	6 204 542.5	3.3	
24/10/2023	11:41:20	MCW-D-ST82	DVV	PC/FA	1095	-	656 969.8	6 204 539.7	656 969.4	6 204 544.5	4.9	
24/10/2023	12:39:37	MCW-D-ST73	Video	SOL	1096	59	657 373.9	6 206 836.9	657 309.5	6 206 853.3	66.4	
24/10/2023	12:40:01	MCW-D-ST73	Still	MCW-D-ST73_01	1097	-	657 373.9	6 206 836.9	657 311.1	6 206 853.5	65.0	
24/10/2023	12:40:16	MCW-D-ST73	Still	MCW-D-ST73_02	1098	-	657 373.9	6 206 836.9	657 312.5	6 206 853.1	63.5	
24/10/2023	12:42:08	MCW-D-ST73	Still	MCW-D-ST73_03	1099	-	657 373.9	6 206 836.9	657 324.2	6 206 850.2	51.4	
24/10/2023	12:42:38	MCW-D-ST73	Still	MCW-D-ST73_04	1100	-	657 373.9	6 206 836.9	657 326.8	6 206 849.2	48.7	
24/10/2023	12:42:46	MCW-D-ST73	Still	MCW-D-ST73_05	1101	-	657 373.9	6 206 836.9	657 327.7	6 206 849.1	47.8	
24/10/2023	12:43:18	MCW-D-ST73	Still	MCW-D-ST73_06	1102	-	657 373.9	6 206 836.9	657 330.6	6 206 848.3	44.8	
24/10/2023	12:43:42	MCW-D-ST73	Still	MCW-D-ST73_07	1103	-	657 373.9	6 206 836.9	657 333.3	6 206 847.8	42.1	
24/10/2023	12:43:54	MCW-D-ST73	Still	MCW-D-ST73_08	1104	-	657 373.9	6 206 836.9	657 334.1	6 206 847.3	41.2	
24/10/2023	12:44:24	MCW-D-ST73	Still	MCW-D-ST73_09	1105	-	657 373.9	6 206 836.9	657 337.0	6 206 846.0	38.0	
24/10/2023	12:44:33	MCW-D-ST73	Still	MCW-D-ST73_10	1106	-	657 373.9	6 206 836.9	657 337.8	6 206 845.7	37.2	
24/10/2023	12:45:17	MCW-D-ST73	Still	MCW-D-ST73_11	1107	-	657 373.9	6 206 836.9	657 342.8	6 206 845.6	32.3	
24/10/2023	12:45:53	MCW-D-ST73	Still	MCW-D-ST73_12	1108	-	657 373.9	6 206 836.9	657 346.1	6 206 844.9	28.9	
24/10/2023	12:46:38	MCW-D-ST73	Still	MCW-D-ST73_13	1109	-	657 373.9	6 206 836.9	657 350.7	6 206 843.8	24.2	
24/10/2023	12:46:59	MCW-D-ST73	Still	MCW-D-ST73_14	1110	-	657 373.9	6 206 836.9	657 352.9	6 206 843.3	22.0	
24/10/2023	12:47:15	MCW-D-ST73	Still	MCW-D-ST73_15	1111	-	657 373.9	6 206 836.9	657 354.5	6 206 842.5	20.2	

Geodetic Parameters: ETRS89, UTM Zone 29N, CM 9° W												
Date	Time [UTC]	Transect/ Station	Type*	Sample Rep/ Still No.	Fix No.	Water Depth [m LAT]	Proposed Location		Actual Location		Offset [m]	Notes
							Easting	Northing	Easting	Northing		
24/10/2023	12:47:49	MCW-D-ST73	Still	MCW-D-ST73_16	1112	-	657 373.9	6 206 836.9	657 358.1	6 206 841.7	16.6	
24/10/2023	12:48:05	MCW-D-ST73	Still	MCW-D-ST73_17	1113	-	657 373.9	6 206 836.9	657 359.6	6 206 841.2	14.9	
24/10/2023	12:48:57	MCW-D-ST73	Still	MCW-D-ST73_18	1114	-	657 373.9	6 206 836.9	657 364.8	6 206 840.1	9.7	
24/10/2023	12:49:38	MCW-D-ST73	Still	MCW-D-ST73_19	1115	-	657 373.9	6 206 836.9	657 368.9	6 206 839.7	5.7	
24/10/2023	12:50:06	MCW-D-ST73	Still	MCW-D-ST73_20	1116	-	657 373.9	6 206 836.9	657 371.9	6 206 839.0	2.9	
24/10/2023	12:50:42	MCW-D-ST73	Still	MCW-D-ST73_21	1117	-	657 373.9	6 206 836.9	657 375.6	6 206 838.0	2.0	
24/10/2023	12:51:04	MCW-D-ST73	Still	MCW-D-ST73_22	1118	-	657 373.9	6 206 836.9	657 377.5	6 206 837.1	3.6	
24/10/2023	12:51:31	MCW-D-ST73	Still	MCW-D-ST73_23	1119	-	657 373.9	6 206 836.9	657 379.8	6 206 836.0	6.0	
24/10/2023	12:52:16	MCW-D-ST73	Still	MCW-D-ST73_24	1120	-	657 373.9	6 206 836.9	657 384.8	6 206 834.7	11.1	
24/10/2023	12:53:08	MCW-D-ST73	Still	MCW-D-ST73_25	1121	-	657 373.9	6 206 836.9	657 389.4	6 206 834.3	15.7	
24/10/2023	12:53:48	MCW-D-ST73	Still	MCW-D-ST73_26	1122	-	657 373.9	6 206 836.9	657 393.9	6 206 832.6	20.5	
24/10/2023	12:54:18	MCW-D-ST73	Still	MCW-D-ST73_27	1123	-	657 373.9	6 206 836.9	657 397.2	6 206 831.8	23.8	
24/10/2023	12:54:55	MCW-D-ST73	Still	MCW-D-ST73_28	1124	-	657 373.9	6 206 836.9	657 401.2	6 206 830.5	28.0	
24/10/2023	12:55:18	MCW-D-ST73	Still	MCW-D-ST73_29	1125	-	657 373.9	6 206 836.9	657 403.4	6 206 829.9	30.3	
24/10/2023	12:55:30	MCW-D-ST73	Still	MCW-D-ST73_30	1126	-	657 373.9	6 206 836.9	657 404.4	6 206 829.5	31.4	
24/10/2023	12:55:51	MCW-D-ST73	Still	MCW-D-ST73_31	1127	-	657 373.9	6 206 836.9	657 406.9	6 206 829.0	34.0	
24/10/2023	12:56:10	MCW-D-ST73	Still	MCW-D-ST73_32	1128	-	657 373.9	6 206 836.9	657 408.4	6 206 828.6	35.4	
24/10/2023	12:56:48	MCW-D-ST73	Still	MCW-D-ST73_33	1129	-	657 373.9	6 206 836.9	657 411.6	6 206 828.0	38.7	
24/10/2023	12:57:18	MCW-D-ST73	Still	MCW-D-ST73_34	1130	-	657 373.9	6 206 836.9	657 414.7	6 206 827.1	41.9	
24/10/2023	12:58:33	MCW-D-ST73	Still	MCW-D-ST73_35	1131	-	657 373.9	6 206 836.9	657 422.2	6 206 825.5	49.6	
24/10/2023	12:58:41	MCW-D-ST73	Still	MCW-D-ST73_36	1132	-	657 373.9	6 206 836.9	657 423.3	6 206 825.2	50.7	
24/10/2023	12:59:15	MCW-D-ST73	Still	MCW-D-ST73_37	1133	-	657 373.9	6 206 836.9	657 427.2	6 206 824.7	54.7	
24/10/2023	12:59:48	MCW-D-ST73	Still	MCW-D-ST73_38	1134	-	657 373.9	6 206 836.9	657 430.1	6 206 824.1	57.7	
24/10/2023	13:00:20	MCW-D-ST73	Still	MCW-D-ST73_39	1135	-	657 373.9	6 206 836.9	657 433.1	6 206 823.1	60.8	
24/10/2023	13:01:00	MCW-D-ST73	Video	EOL	1136	-	657 373.9	6 206 836.9	657 437.2	6 206 822.1	64.9	
24/10/2023	13:34:23	MCW-D-ST73	DVV	PC/FA	1137	57	657 373.9	6 206 836.9	657 312.4	6 206 854.1	63.9	

Notes
 UTC = Coordinated Universal Time
 LAT = Lowest Astronomical Tide
 NF = No fix
 SOL = Start of line
 EOL = End of line
 HG = Hamon grab
 DVV = Dual van Veen grab
 PC = Physico chemical sample
 WS = Water sample
 FA = Faunal sample A
 NS = No sample

C.2 Grab Log

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
07/09/2023	13:20:36	MCW-A-ST02	NS	19	4.5	4.5	S	Sand	2.5Y 3/2	Sample taken at an angle
07/09/2023	13:20:36	MCW-A-ST02	NS	19	5	5	S	Sand	2.5Y 3/2	Sample taken at an angle
07/09/2023	13:27:59	MCW-A-ST02	FA	20	11	11	S	Sand	2.5Y 3/2	
07/09/2023	13:27:59	MCW-A-ST02	PC	20	12.5	12.5	S	Sand	2.5Y 3/2	
07/09/2023	15:43:26	MCW-A-ST01	FA	35	7.5	7.5	S	Sand	2.5Y 4/2	
07/09/2023	15:43:26	MCW-A-ST01	NS	35	5	5	S	Sand	2.5Y 4/2	
07/09/2023	15:53:20	MCW-A-ST01	PSD	36	7.5	7.5	S	Sand	2.5Y 4/2	
07/09/2023	17:50:47	MCW-A-ST05	PC	53	8	8	S	Sand	2.5Y 4/2	
07/09/2023	20:22:49	MCW-A-ST12	PC	70	12	12	S	Sand	2.5Y 3/2	
07/09/2023	22:32:01	MCW-A-ST22	NS	89	5	5	S	Sand	5Y 4/2	Insufficient sample volume
07/09/2023	22:32:01	MCW-A-ST22	NS	89	5	5	S	Sand	5Y 4/2	Insufficient sample volume
07/09/2023	22:40:36	MCW-A-ST22	NS	90	5	5	S	Sand	5Y 4/2	Insufficient sample volume
07/09/2023	22:40:36	MCW-A-ST22	NS	90	5	5	S	Sand	5Y 4/2	Insufficient sample volume
07/09/2023	22:49:23	MCW-A-ST22	NS	91	5	5	S	Sand	5Y 4/2	Insufficient sample volume
07/09/2023	22:49:23	MCW-A-ST22	NS	91	0	0	-	-	-	Did not fire
07/09/2023	22:59:10	MCW-A-ST22	PC	92	7	7	S	Sand	5Y 4/2	
08/09/2023	01:27:06	MCW-A-ST34	PC	109	10	10	S	Sand	2.5Y 4/3	
08/09/2023	03:37:34	MCW-A-ST44A	FA	125	10	10	S	Sand	2.5Y 4/3	
08/09/2023	03:37:34	MCW-A-ST44A	PSD	125	10	10	S	Sand	2.5Y 4/3	
08/09/2023	05:29:44	MCW-A-ST55	PC	141	12	12	S	Sand	2.5Y 5/3	
08/09/2023	08:07:04	MCW-A-ST36	PC	157	14	14	S	Sand	5Y 5/2	
08/09/2023	10:35:51	MCW-A-ST14	PC	173	12	12	S	Sand	2.5Y 5/3	

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
08/09/2023	13:04:49	MCW-A-ST08A	PC	195	11	11	S	Coarse sand	2.5Y 5/4	
08/09/2023	13:04:49	MCW-A-ST08A	NS	195	0	0	-	-	-	Pebble in jaws
08/09/2023	13:17:52	MCW-A-ST08A	FA	196	8	8	S	Coarse sand	2.5Y 5/4	
08/09/2023	14:45:00	MCW-A-ST07A	FA	211	8.5	8.5	S	Sand	2.5Y 6/4	
08/09/2023	14:45:00	MCW-A-ST07A	PC	211	8	8	S	Sand	2.5Y 6/4	
08/09/2023	17:21:06	MCW-A-ST03	NS	226	5	5	S	Sand	-	Insufficient sample volume
08/09/2023	17:21:06	MCW-A-ST03	NS	226	5	5	S	Sand	-	Insufficient sample volume
08/09/2023	17:29:29	MCW-A-ST03	FA	227	8	8	S	Sand	2.5Y 3/2	
08/09/2023	17:29:29	MCW-A-ST03	PSD	227	7	7	S	Sand	2.5Y 3/2	
12/09/2023	18:17:01	MCW-C-ST20	FA	239	9.5	9.5	S	Sand	5Y 4/4	
12/09/2023	18:17:01	MCW-C-ST20	PSD	239	9.5	9.5	S	Sand	5Y 4/4	
12/09/2023	19:51:13	MCW-C-ST31	FA	253	8.5	8.5	S	Sand	2.5Y 4/4	
12/09/2023	19:51:13	MCW-C-ST31	PSD	253	9	9	S	Sand	2.5Y 4/4	
12/09/2023	21:00:27	MCW-C-ST32	FA	266	7.5	7.5	S	Sand	2.5Y 3/3	
12/09/2023	21:00:27	MCW-C-ST32	PSD	266	8.5	8.5	S	Sand	2.5Y 3/3	
12/09/2023	22:15:57	MCW-C-ST43	FA	279	10	10	S	Sand	2.5Y 4/3	
12/09/2023	22:15:57	MCW-C-ST43	PSD	279	11	11	S	Sand	2.5Y 4/3	
13/09/2023	00:29:49	MCW-C-ST42	FA	297	9	9	S	Sand	2.5Y 4/3	
13/09/2023	00:29:49	MCW-C-ST42	PC	297	11	11	S	Sand	2.5Y 4/3	
13/09/2023	03:41:47	MCW-C-ST51	PC	316	12	12	S	Sand	2.5Y 4/3	
13/09/2023	05:06:19	MCW-C-ST52	FA	332	9	9	S	Sand	2.5Y 4/3	
13/09/2023	05:06:19	MCW-C-ST52	PSD	332	10	10	S	Sand	2.5Y 4/3	
13/09/2023	06:52:02	MCW-C-ST53	FA	348	10	10	S	Sand	2.5Y 5/3	Damaged <i>A. islandica</i>
13/09/2023	06:52:02	MCW-C-ST53	NS	348	0	0	-	-	-	Shells in jaws, washout

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
13/09/2023	07:02:41	MCW-C-ST53	PC	349	10	10	S	Sand	2.5Y 5/3	
13/09/2023	08:26:55	MCW-C-ST54	FA	365	11	11	S	Sand	2.5Y 5/3	<i>A. islandica</i> 9 cm - returned to sea
13/09/2023	08:26:55	MCW-C-ST54	PSD	365	12	12	S	Sand	2.5Y 5/3	
16/09/2023	13:43:00	MCW-C-ST92	PC	384	8	8	S	Sand	2.5Y 5/3	Sand eels present
16/09/2023	17:35:00	MCW-C-ST77	PC	401	7.5	7.5	S	Sand	2.5Y 4/3	
16/09/2023	22:23:00	MCW-C-ST41	PSD	436	13	13	S	Sand	2.5Y 5/2	Shell fragments
16/09/2023	22:23:00	MCW-C-ST41	FA	436	11	11	S	Sand	2.5Y 5/2	Shell fragments
17/09/2023	01:46:00	MCW-C-ST63	PC	451	13	13	S	Sand	2.5Y 4/3	
17/09/2023	01:46:00	MCW-C-ST63	FA	451	11	11	S	Sand	2.5Y 4/3	
17/09/2023	03:56:36	MCW-C-ST62	NS	466	11	11	S	Sand	2.5Y 4/3	<i>A. islandica</i> in jaws (crushed)
17/09/2023	03:56:36	MCW-C-ST62	NS	466	0	0	S	Sand	2.5Y 4/3	<i>A. islandica</i> in jaws (crushed)
17/09/2023	04:14:12	MCW-C-ST62	FA	467	11	11	S	Sand	2.5Y 4/3	
17/09/2023	04:14:12	MCW-C-ST62	PSD	467	10	10	S	Sand	2.5Y 4/3	
17/09/2023	05:39:59	MCW-C-ST71	NS	481	0	0	S	Sand	2.5Y 4/3	<i>A. islandica</i> shells in jaw, sample washout. Live <i>A. islandica</i> 9.8cm (returned to sea)
17/09/2023	05:39:59	MCW-C-ST71	NS	481	11	11	S	Sand	2.5Y 4/3	<i>A. islandica</i> in jaws (crushed) and live <i>A. islandica</i> 9.5cm (returned to sea). Some sample washed out.
17/09/2023	05:53:26	MCW-C-ST71	PSD	482	13	13	S	Sand	2.5Y 4/3	
17/09/2023	05:53:26	MCW-C-ST71	NS	482	0	0	S	Sand	2.5Y 4/3	<i>A. islandica</i> in jaws, sample washout
17/09/2023	06:11:16	MCW-C-ST71	FA	483	11	11	S	Sand	2.5Y 4/3	<i>A. islandica</i> 8.1cm (returned to sea)
17/09/2023	06:11:16	MCW-C-ST71	NS	483	0	0	S	Sand	2.5Y 4/3	Damaged <i>A. islandica</i> in jaws and live <i>A. islandica</i> 10cm (returned to sea)
17/09/2023	08:51:17	MCW-C-ST70	FA	498	13	13	S	Sand	2.5Y 4/3	

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
17/09/2023	08:51:17	MCW-C-ST70	PC	498	11	11	S	Sand	2.5Y 4/3	<i>A.islandica</i> 8.5cm (returned to sea)
17/09/2023	19:35:00	MCW-C-ST79	PSD	514	7	7	S	Sand	2.5Y 4/3	Crushed <i>A.islandica</i> - grab jaws closed
17/09/2023	19:35:00	MCW-C-ST79	FA	514	8	8	S	Sand	2.5Y 4/3	
17/09/2023	22:35:00	MCW-C-ST75	PC	533	11	11	S	Sand	2.5Y 4/3	
23/09/2023	08:35:00	MCW-C-ST91	NS	551	0	0		-	-	Rock in jaws - switched to hamon grab
23/09/2023	08:35:00	MCW-C-ST91	NS	551	0	0	-	-	-	
23/09/2023	11:05:00	MCW-C-ST83	NS	574	0	0	-	Small pebbles	-	Ophiuroidea arms
23/09/2023	11:12:00	MCW-C-ST83	NS	575	0	0	-	Small pebbles	-	
23/09/2023	11:22:00	MCW-C-ST83	NS	576	0	0	-	-	-	
23/09/2023	12:17:00	MCW-C-ST91	PC	577	0.5	0	-	Coarse sand, shell fragments and pebbles	-	
23/09/2023	12:27:00	MCW-C-ST91	NS	578	0.1	0	-	Coarse sand, shell fragments and cobbles	-	One large cobble
23/09/2023	12:34:00	MCW-C-ST91	NS	579	0	0	-	-	-	
09/10/2023	09:05:00	MCW-B-ST57	PC	601	9	9	S	Sand	2.5Y 5/4	
09/10/2023	11:49:00	MCW-B-ST59A	PC	619	9	9	S	Sand with shell fragments	2.5Y 4/2	
15/10/2023	15:33:12	MCW-B-ST38A	PC	648	10	10	S	Sand	2.5Y 4/2	
15/10/2023	15:33:12	MCW-B-ST38A	PC	648	9	9	S	Sand	2.5Y 4/2	
15/10/2023	17:54:00	MCW-B-ST28	PC	673	11	11	S	Sand	2.5Y 4/2	
15/10/2023	17:54:00	MCW-B-ST28	PC	673	10	10	S	Sand	2.5Y 4/2	
15/10/2023	19:22:56	MCW-B-ST29A	PSD	699	10	10	S	Sand	2.5Y 4/2	
15/10/2023	19:22:56	MCW-B-ST29A	FA	699	11	11	S	Sand	2.5Y 4/2	

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
15/10/2023	21:17:45	MCW-B-ST30A	PC	723	10	10	S	Sand	2.5Y 4/2	
15/10/2023	21:17:45	MCW-B-ST30A	FA	723	10	10	S	Sand	2.5Y 4/2	
15/10/2023	23:35:06	MCW-B-ST19A	PSD	749	8.5	8.5	S	Sand	2.5Y 4/2	
15/10/2023	23:35:06	MCW-B-ST19A	FA	749	9.5	9.5	S	Sand	2.5Y 4/2	
16/10/2023	02:20:06	MCW-B-ST18A	PC	770	7	7	S	Sand	2.5Y 4/2	
16/10/2023	02:20:06	MCW-B-ST18A	FA	770	7.5	7.5	S	Sand	2.5Y 4/2	
16/10/2023	03:45:51	MCW-B-ST17A	PC	783	9.5	9.5	S	Sand	2.5Y 4/2	
16/10/2023	03:45:51	MCW-B-ST17A	FA	783	10	10.0	S	Sand	2.5Y 4/2	
16/10/2023	05:25:42	MCW-B-ST10	PSD	798	9	9	S	Sand	2.5Y 4/2	
16/10/2023	05:25:42	MCW-B-ST10	FA	798	9	9	S	Sand	2.5Y 4/2	
16/10/2023	07:07:21	MCW-B-ST09A	PSD	820	10	10	mS	Muddy sand	2.5Y 4/2	
16/10/2023	07:07:21	MCW-B-ST09A	FA	820	9.5	9.5	mS	Muddy sand	2.5Y 4/2	
17/10/2023	02:37:14	MCW-D-ST103A	PSD	831	9	9	S	Sand	2.5Y 4.4	
17/10/2023	02:37:14	MCW-D-ST103A	FA	831	8	8	S	Sand	2.5Y 4.4	
17/10/2023	05:42:46	MCW-D-ST100A	PC	848	13	13	G	Gravel	2.5Y 5.6	
17/10/2023	05:42:46	MCW-D-ST100A	FA	848	11.3	11.3	G	Gravel	2.5Y 5.6	
22/10/2023	22:00:26	MCW-D-ST64	PSD	873	10	10	S	Sand	2.5Y 4/3	
22/10/2023	22:00:26	MCW-D-ST64	FA	873	9	9	S	Sand	2.5Y 4/3	
22/10/2023	00:19:10	MCW-D-ST72A	PSD	889	7.5	7.5	mS	Muddy sand	2.5Y 4/4	
22/10/2023	00:19:10	MCW-D-ST72A	FA	889	7.5	7.5	mS	Muddy sand	2.5Y 4/4	
23/10/2023	01:59:31	MCW-D-ST81	PSD	902	8	8	mS	Muddy sand	2.5Y 4/4	
23/10/2023	01:59:31	MCW-D-ST81	FA	902	8.5	8.5	mS	Muddy sand	2.5Y 4/4	
23/10/2023	04:31:45	MCW-D-ST80	PC	923	8.5	8.5	mS	Muddy sand	2.5Y 4/3	
23/10/2023	04:31:45	MCW-D-ST80	FA	923	6.5	6.5	mS	Muddy sand	2.5Y 4/3	

Date	Time [UTC]	Station	Sample Rep	Fix No.	Sample Depth [cm]	Sediment Description (including stratigraphy)				Comments (fauna, smell, bioturbation, debris)
						Depth [cm]	Sediment Type*	Sediment Description	Munsell Colour	
23/10/2023	06:58:28	MCW-D-ST86A	PC	938	11	11	S	Sand	2.5Y 5/4	
23/10/2023	09:56:26	MCW-D-ST104	PC	960	NS	NS	S	Sand	2.5Y 6/6	
23/10/2023	09:56:26	MCW-D-ST104	PC	960	11	11	S	Sand	2.5Y 6/6	
23/10/2023	12:41:59	MCW-D-ST108A	PC	986	7	7	gS	Gravelly sand	2.5Y 6/3	
23/10/2023	14:40:34	MCW-D-ST101	PSD	1007	14	14	S	Sand	10YR 6/4	
23/10/2023	14:40:34	MCW-D-ST101	FA	1007	17	17	S	Sand	10YR 6/4	
23/10/2023	16:40:21	MCW-D-ST95A	PC	1029	-	-	-	-	-	
24/10/2023	07:45:25	MCW-D-ST88A	PSD	1045	8	8	S	Sand	2.5Y 5/4	
24/10/2023	07:45:25	MCW-D-ST88A	FA	1045	8	8	S	Sand	2.5Y 5/4	
24/10/2023	09:05:24	MCW-D-ST89A	PSD	1056	11	11	S	Sand	2.5Y 5/4	
24/10/2023	09:05:24	MCW-D-ST89A	FA	1056	12	12	S	Sand	2.5Y 5/4	
24/10/2023	11:41:20	MCW-D-ST82	PC	1095	14	14	S	Sand	2.5Y 5/3	
24/10/2023	11:41:20	MCW-D-ST82	FA	1095	10	10	S	Sand	2.5Y 5/2	
24/10/2023	13:34:23	MCW-D-ST73	PSD	1137	12	12	S	Sand	5YR 5/2	
24/10/2023	13:34:23	MCW-D-ST73	FA	1137	11	11	S	Sand	5YR 5/2	
Notes UTC = Coordinated Universal Time NS = No sample PC = Physico-chemical sample PSD = Particle size distribution FA = Faunal sample A										

C.3 Photographic Log

Geodetic Parameters: ETRS89 / UTM Zone 29N [m]													
Date	Transect/ Station	Section	Start of Line			End of line			Length	Still Nos.	Sediment Description	Fauna/Bioturbation/Debris	Habitat Classification (JNCC)
			Time [UTC]	Easting	Northing	Time [UTC]	Easting	Northing					
07/09/2023	MCW-A-ST01	MCW-A-ST01	14:29:07	641 119.6	6 225 432.2	14:38:11	641 155.5	6 225 389.5	55.8	MCW-A-ST01_01 to MCW-A- ST01_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs with associated anemones (Paguroidea with associated Actiniaria), fish (Osteichthyes inc. <i>Callionymus</i> sp.). Faunal burrows, casts and tubes	Offshore circalittoral sand (SS.SSa.Osa)
07/09/2023	MCW-A-ST02	MCW-A-ST02	12:07:14	643 864.3	6 225 561.8	12:19:01	643 890.9	6 225 512.1	56.3	MCW-A-ST02_01 to MCW-A- ST02_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. brittlestar (Ophiuroidea), hermit crab (Paguroidea), fish (Osteichthyes inc. <i>Callionymus</i> sp.), thornback ray (<i>Raja</i> <i>clavata</i>). Faunal burrows, casts and tubes	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST03	MCW-A-ST03	16:37:46	646 751.4	6 225 373.9	16:47:24	646 762.3	6 225 315.4	59.4	MCW-A-ST03_01 to MCW-A- ST03_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. soft coral (<i>Alcyonium</i> <i>digitatum</i>), polychaete worm (Polychaeta), starfish (<i>Astropecten irregularis</i>), brittlestar (Ophiuridae inc. <i>Ophiura ophiura</i>), hermit crab (Paguroidea), bryozoan (Flustridae), fish (Osteichthyes inc. <i>Callionymus</i> sp.). Faunal burrows, casts and tubes. Possible <i>Arctica</i> <i>islandica</i> shell in sediment	Offshore circalittoral sand (SS.SSa.Osa)
07/09/2023	MCW-A-ST05	MCW-A-ST05	17:01:30	638 498.6	6 223 011.3	17:10:42	638 495.0	6 222 954.4	57.0	MCW-A-ST05_01 to MCW-A- ST05_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. anemone (Anthozoa), hermit crab (Paguroidea), possible ocean quahog siphons (<i>Arctica islandica</i>). Faunal tubes, casts and burrows	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST07A	MCW-A-ST07A	14:12:56	643 944.6	6 223 040.6	14:22:20	643 891.0	6 223 017.0	58.5	MCW-A- ST07A_01 to MCW-A- ST07A_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (Asteroidea), brittlestars (Ophiuridae), hermit crab with associated faunal turf (Paguroidea with associated Hydractiniidae). Faunal burrows, tracks, casts and tubes. <i>Arctica islandica</i> shell in sediment	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST08A	MCW-A-ST08A_1	12:13:57	645 659.5	6 221 867.8	12:18:23	645 654.4	6 221 840.7	27.6	MCW-A- ST08A_01 to MCW-A- ST08A_09	Coarse sediment including shell hash, sand, gravel, and cobbles with small scale ripples	Sparse fauna inc. soft coral (<i>Alcyonium</i> <i>digitatum</i>), cup corals (Caryophylliidae), crab (<i>Atelecyclus rotundatus</i>), faunal turf (Hydrozoa/Bryozoa), barnacles (Sessilia), serpulid worms (Serpulidae), fish (Osteichthyes inc. <i>Callionymus</i> sp. and Gadidae)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
		MCW-A-ST08A_2	12:18:23	645 654.4	6 221 840.7	12:24:23	645 647.0	6 221 804.0	37.4	MCW-A- ST08A_10 to MCW-A- ST08A_17	Slightly gravelly sand with small scale ripples, shell fragments and cobbles	Sparse fauna inc. soft coral (<i>Alcyonium</i> <i>digitatum</i>), barnacles (Sessilia), cup coral (Caryophylliidae), tube anemone (Ceriantharia), hermit crab (Paguroidea), bryozoan (Flustridae), faunal turf (Hydrozoa/Bryozoa). Fish (Osteichthyes inc. <i>Callionymus</i> sp.), flatfish (Pleuronectiformes)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
07/09/2023	MCW-A-ST12	MCW-A-ST12	19:37:29	636 002.9	6 220 270.2	19:48:05	636 004.6	6 220 206.9	63.4	MCW-A-ST12_01 to MCW-A- ST12_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), sea snail (Gastropoda). Fish (Osteichthyes inc. ?Gobiidae), flatfish (Pleuronectiformes inc. Soleidae). Faunal burrows, casts and tubes. Possible <i>Arctica islandica</i> shell in sediment	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST14	MCW-A-ST14	09:41:24	640 982.6	6 220 520.5	09:49:45	640 976.4	6 220 468.8	52.0	MCW-A-ST14_01 to MCW-A- ST14_12	Sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (<i>Pagurus</i> <i>prideaux</i> and associated <i>Calliactis palliata</i>), flatfish (Pleuronectiformes) Faunal tubes	Offshore circalittoral sand (SS.SSa.Osa)

07/09/2023	MCW-A-ST22	MCW-A-ST22	21:42:45	630 633.6	6 217 717.1	21:52:34	630 622.6	6 217 656.5	61.6	MCW-A-ST22_01 to MCW-A-ST22_13	Slightly gravelly sand with small scale ripples and shell fragments	Possible sponge (?Porifera), soft coral (<i>Alcyonium digitatum</i>), anemone (Hormathiidae), possible sea cucumber (?Holothuroidea), hermit crab (<i>Pagurus prideaux</i> and associated <i>Calliactis palliata</i>), faunal turf (Hydrozoa/Bryozoa), fish (Osteichthyes inc. Gadidae, <i>Callionymus</i> sp. and ? <i>Scomber</i> sp.), flatfish (Pleuronectiformes, inc. Soleidae and <i>Buglossidium luteum</i>). Faunal casts, tubes and tracks	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST34	MCW-A-ST34	00:27:15	633 130.5	6 215 215.3	00:36:35	633 088.2	6 215 176.5	57.4	MCW-A-ST34_01 to MCW-A-ST34_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (<i>Asterias rubens</i>), hermit crab (Paguroidea), squid (Cephalopoda inc. Loliginidae and <i>Sepiolo</i> sp.), fish (Osteichthyes inc. Gadidae and ?Triglidae), flatfish (Pleuronectiformes inc. Soleidae and <i>Buglossidium luteum</i>). Faunal casts	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST36	MCW-A-ST36	07:04:17	638 876.7	6 214 834.3	07:13:02	638 863.1	6 214 781.9	54.1	MCW-A-ST36_01 to MCW-A-ST36_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (<i>Astropecten irregularis</i>), sand eels (Ammodytidae), fish (Osteichthyes)	Offshore circalittoral sand (SS.SSa.Osa)
08/09/2023	MCW-A-ST44A	MCW-A-ST44A_1	03:08:12	630 639.4	6 212 685.9	03:15:18	630 597.2	6 212 700.0	44.4	MCW-A-ST44A_01 to MCW-A-ST44A_11	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea), crab (Brachyura), squid (Loliginidae and <i>Sepiolo</i> sp.), bryozoan (<i>Flustra foliacea</i>), krill (Euphausiacea), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
		MCW-A-ST44A_2	03:15:18	630 597.2	6 212 700.0	03:17:33	630 583.8	6 212 704.4	14.1	MCW-A-ST44A_12 to MCW-A-ST44A_14	Gravelly sand with shell fragments	Sparse fauna inc. hermit crab (<i>Pagurus prideaux</i> and associated <i>Calliactis palliata</i>), fish (Osteichthyes), flatfish (Pleuronectiformes). Anthropogenic debris (chord or rope)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
08/09/2023	MCW-A-ST55	MCW-A-ST55	04:35:51	633 382.5	6 209 770.4	04:44:30	633 405.9	6 209 723.2	52.6	MCW-A-ST55_01 to MCW-A-ST55_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), faunal turf (Hydrozoa/Bryozoa), fish (Osteichthyes inc. Gadidae, Triglidae and <i>Merlangius merlangus</i>), flatfish (Pleuronectiformes inc. Soleidae). Faunal tracks and tubes	Offshore circalittoral sand (SS.SSa.Osa)
16/10/2023	MCW-B-ST09A	MCW-B-ST09A	06:27:57	650 116.9	6 222 911.4	06:47:25	650 013.4	6 222 871.7	110.8	MCW-B-ST09A_01 to MCW-B-ST09A_16	Slightly gravelly muddy sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura inc. <i>Cancer pagurus</i> , <i>Liocarcinus</i> sp. and ? <i>Goneplax rhomboides</i>), hermit crabs (Paguroidea), starfish (Asteroidea inc. <i>Astropecten irregularis</i>), brittlestar (Ophiuroidea), shrimp (Caridea), fish (Osteichthyes inc. Clupeidae and Gadidae), sand eels (Ammodytidae), flatfish (Pleuronectiformes). Elasmobranch egg cases (Chondrichthyes). Algae (<i>Laminaria</i> sp. debris and Rhodophyta debris). Faunal burrows, tubes and casts. Anthropogenic debris (crab pot)	Offshore circalittoral sand (SS.SSa.Osa)
16/10/2023	MCW-B-ST010	MCW-B-ST010	04:51:35	652 151.9	6 222 703.7	05:09:40	652 088.1	6 222 619.9	105.3	MCW-B-ST10_01 to MCW-B-ST10_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. bivalves (Bivalvia inc. ? <i>Arctica islandica</i>), squid (Loliginidae), hermit crab (Paguroidea), starfish (Asteroidea inc. <i>Luidia sarsi</i>), polychaete worms (Polychaeta), fish (Osteichthyes inc. Gadidae, Clupeidae, Callionymidae, Triglidae, <i>Clupea harengus</i>), sand eels (Ammodytidae), flatfish (Pleuronectiformes Soleidae inc. <i>Microchirus variegatus</i>). Faunal tracks, casts and tubes	Offshore circalittoral sand (SS.SSa.Osa)
16/10/2023	MCW-B-ST017A	MCW-B-ST017A	03:07:59	649 187.5	6 220 216.9	03:25:48	649 122.9	6 220 136.9	102.8	MCW-B-ST17A_01 to MCW-B-ST17A_10	Sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (<i>Astropecten irregularis</i>), hermit crabs (Paguroidea), fish (Osteichthyes inc. Triglidae, Gadidae, <i>Scomber scombrus</i> , <i>Clupea harengus</i>), flatfish (Pleuronectiformes inc. Soleidae and <i>Pleuronectes platessa</i>). Empty <i>Arctica islandica</i> shell. Algae (Rhodophyta debris). Faunal casts and tracks	Offshore circalittoral sand (SS.SSa.Osa)
16/10/2023	MCW-B-ST018A	MCW-B-ST018A	00:58:49	651 412.7	6 220 771.5	01:19:09	651 335.2	6 220 687.3	114.5	MCW-B-ST18A_01 to MCW-B-ST18A_16	Slightly gravelly sand with small scale ripples and shell fragments	Burrowing anemones (Anthozoa inc. Halcampoides and Ceriantharia), possible cephalopod (Cephalopoda), starfish (Asteroidea inc. <i>Astropecten irregularis</i>), crab (<i>Liocarcinus</i> sp.), hermit crab (Paguroidea), fish (Osteichthyes inc. Gadidae, Callionymidae,	Offshore circalittoral sand (SS.SSa.Osa)

												<i>Clupea harengus</i>), flatfish (Pleuronectiformes inc. Soleidae, <i>Limanda limanda</i> and <i>Microchirus variegatus</i>). Faunal tracks, tubes and casts. Empty <i>Arctica islandica</i> shell.	
15/10/2023	MCW-B-ST019A	MCW-B-ST019A	22:21:51	654 910.7	6 219 719.9	22:40:31	654 911.1	6 219 834.7	114.8	MCW-B-ST19A_01 to MCW-B-ST19A_24	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs with associated faunal turf (Paguroidea with associated Hydractiniidae), Shrimp (Caridea), fish (Osteichthyes inc. Gobiidae), flatfish (Pleuronectiformes). Algae (Rhodophyta debris). Faunal casts	Offshore circalittoral sand (SS.SSa.Osa)
15/10/2023	MCW-B-ST28	MCW-B-ST28	16:59:08	646 381.0	6 217 841.8	17:15:40	646 298.0	6 217 783.6	101.4	MCW-B-ST28_01 to MCW-B-ST28_20	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs with associated faunal turf and anemones (Paguroidea with associated Hydractiniidae and <i>Pagurus prideaux</i> with associated <i>Calliactis palliata</i>), possible tunicate (Asciacea), spoonworm (<i>Echiura</i> possibly <i>Maxmuelleria</i> sp.), starfish (Asteroidea), brittlestars (Ophiuroidea inc. <i>Ophiura ophiura</i>), crab (<i>Liocarcinus</i> sp.), bryozoans (unattached <i>Flustra foliacea</i>), fish (Osteichthyes inc. Gobiidae, Callionymidae and Triglidae), flatfish (Pleuronectiformes). Algae (Rhodophyta debris). Faunal casts and tubes. Empty <i>Arctica islandica</i> shell.	Offshore circalittoral sand (SS.SSa.Osa)
15/10/2023	MCW-B-ST29A	MCW-B-ST29A	18:43:48	649 612.9	6 217 240.6	19:03:10	649 492.7	6 217 236.7	120.3	MCW-B-ST29A_01 to MCW-B-ST29A_22	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (Asteroidea inc. <i>Luidia sarsi</i>), brittlestar (Ophiuroidea), hermit crab (Paguroidea), crab (<i>Cancer pagurus</i>), fish (Osteichthyes inc. Gadidae, <i>Scomber scombrus</i>), sand eels (Ammodytidae), flatfish (Pleuronectiformes inc. Soleidae). Faunal tracks, casts and tubes	Offshore circalittoral sand (SS.SSa.Osa)
15/10/2023	MCW-B-ST30A	MCW-B-ST30A	20:19:27	652 172.8	6 217 411.6	20:37:05	652 112.3	6 217 501.2	108.1	MCW-B-ST30A_01 to MCW-B-ST30A_18	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (Asteroidea inc. <i>Luidia sarsi</i> and <i>Astropecten irregularis</i>), polychaete worms (Polychaeta), squid (Loliginidae), fish (Osteichthyes inc. Callionymidae, Gadidae, Gobiidae, <i>Scomber scombrus</i> , <i>Trisopterus</i> sp. and <i>Merlangius merlangus</i>), sand eels (Ammodytidae), flatfish (Pleuronectiformes). Faunal casts and tracks. Empty <i>Arctica islandica</i> shell	Offshore circalittoral sand (SS.SSa.Osa)
15/10/2023	MCW-B-ST38A	MCW-B-ST38A	13:46:49	644 192.7	6 214 646.5	14:04:53	644 087.4	6 214 668.1	107.5	MCW-B-ST38A_01 to MCW-B-ST38A_25	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), possible tunicate (?Asciacea), squid (Loliginidae), starfish (<i>Astropecten irregularis</i>), bryozoans (Flustrina), fish (Osteichthyes inc. Gobiidae, Callionymidae). Faunal casts, tubes and tracks	Offshore circalittoral sand (SS.SSa.Osa)
09/10/2023	MCW-B-ST57	MCW-B-ST57	07:35:51	638 413.9	6 209 784.4	07:47:30	638 382.7	6 209 844.6	67.8	MCW-B-ST57_01 to MCW-B-ST57_11	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), crab (<i>Corystes cassivelaunus</i>), fish (Osteichthyes inc. Callionymidae, Gadidae, <i>Scomber scombrus</i> and <i>Clupea harengus</i>), sand eels (Ammodytidae)	Offshore circalittoral sand (SS.SSa.Osa)
			07:47:30	638 382.7	6 209 844.6	07:49:48	638 376.8	6 209 856.8	13.6	MCW-B-ST57_12 to MCW-B-ST57_14	Gravelly sand with shell fragments	Sparse fauna inc. hermit crab (Paguroidea), faunal turf (Bryozoa/Hydrozoa), fish (Osteichthyes inc. <i>Scomber scombrus</i>)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
			07:49:48	638 376.8	6 209 856.8	07:54:20	638 364.0	6 209 882.0	28.3	MCW-B-ST57_15 to MCW-B-ST57_19	Sand with small scale ripples and shell fragments	Sparse fauna inc. fish (Osteichthyes inc. Callionymidae, Gadidae)	Offshore circalittoral sand (SS.SSa.Osa)
09/10/2023	MCW-B-ST59A	MCW-B-ST59A	10:12:32	643 527.5	6 210 197.0	10:31:36	643 420.9	6 210 170.9	109.7	MCW-B-ST59A_01 to MCW-B-ST59A_15	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. possible brittlestar (Ophiuroidea), hermit crab (Paguroidea), fish (Osteichthyes). Faunal casts and tubes. Empty <i>Arctica islandica</i> shells (observed throughout transect)	Offshore circalittoral sand (SS.SSa.Osa)
12/09/2023	MCW-C-ST20	MCW-C-ST20	17:41:20	657 510.3	6 219 953.6	17:52:12	657 467.3	6 220 004.7	66.8	MCW-C-ST20_01 to MCW-C-ST20_10	Slightly gravelly sand with small scale ripples and shell fragments and sporadic cobbles	Sparse fauna inc. possible ocean quahog (<i>Arctica islandica</i>), hermit crab (Paguroidea), fish (Osteichthyes inc. Callionymidae)	Offshore circalittoral sand (SS.SSa.Osa)

12/09/2023	MCW-C-ST31	MCW-C-ST31	19:23:49	654 524.4	6 217 459.8	19:34:12	654 515.0	6 217 522.5	63.4	MCW-C-ST31_01 to MCW-C-ST31_10	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), starfish (<i>Astropecten irregularis</i>), faunal turf (Hydrozoa/Bryozoa), flatfish (Soleidae)	Offshore circalittoral sand (SS.SSa.Osa)
12/09/2023	MCW-C-ST32	MCW-C-ST32	20:36:19	657 077.1	6 217 652.1	20:46:06	657 082.7	6 217 713.0	61.2	MCW-C-ST32_01 to MCW-C-ST32_10	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. fish (Osteichthyes inc. Gadidae, Callionymidae, <i>Scomber scombrus</i>). Faunal tracks and burrows	Offshore circalittoral sand (SS.SSa.Osa)
16/09/2023	MCW-C-ST41	MCW-C-ST41	21:43:06	651 608.4	6 215 065.2	21:52:03	651 653.3	6 215 095.2	54.0	MCW-C-ST41_01 to MCW-C-ST41_10	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura), starfish (<i>Luidia ciliaris</i>), squid (Loliginidae), fish (Osteichthyes)	Offshore circalittoral sand (SS.SSa.Osa)
			21:52:03	651 653.3	6 215 095.2	22:06:34	651 725.9	6 215 148.4	90.0	MCW-C-ST41_11 to MCW-C-ST41_30	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura inc. ?Inachida), hermit crab (Paguroidea), starfish (Asteroidea), squid (Loliginidae), faunal turf (Hydrozoa/Bryozoa), fish (Osteichthyes inc. Callionymidae, Gadidae), flatfish (Pleuronectiformes inc. Soleidae)	Offshore circalittoral sand (SS.SSa.Osa)
12/09/2023	MCW-C-ST42	MCW-C-ST42	23:32:20	654 566.3	6 214 919.6	23:42:01	654 608.2	6 214 962.5	59.9	MCW-C-ST42_01 to MCW-C-ST42_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. brittlestars (Ophiuroidea), squid (Loliginidae), fish (Osteichthyes inc. Triglidae), flatfish (Pleuronectiformes). Faunal tracks and burrows	Offshore circalittoral sand (SS.SSa.Osa)
12/09/2023	MCW-C-ST43	MCW-C-ST43	21:47:55	657 099.2	6 215 064.9	21:57:32	657 112.5	6 215 123.3	59.9	MCW-C-ST43_01 to MCW-C-ST43_10	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (<i>Cancer pagurus</i>), hermit crabs (Paguroidea), starfish (<i>Astropecten irregularis</i>), fish (Osteichthyes), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
13/09/2023	MCW-C-ST51	MCW-C-ST51	02:47:02	649 241.1	6 212 426.3	02:56:43	649 206.5	6 212 376.2	60.8	MCW-C-ST51_01 to MCW-C-ST51_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura), hermit crabs (Paguroidea), squid (Loliginidae), fish (Osteichthyes inc. Callionymidae), flatfish (Pleuronectiformes). Faunal casts and burrows. Empty <i>Arctica islandica</i> shells. Faunal tracks and tubes	Offshore circalittoral sand (SS.SSa.Osa)
13/09/2023	MCW-C-ST52	MCW-C-ST52	04:37:02	651 655.7	6 212 473.4	04:46:40	651 603.1	6 212 444.1	60.2	MCW-C-ST52_01 to MCW-C-ST52_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea), brittlestars (Ophiuroidea), starfish (<i>Astropecten irregularis</i>), ray (Rajiformes), flatfish (Pleuronectiformes inc. <i>Pleuronectes platessa</i> and ? <i>Microchirus variegatus</i>), red gurnard (<i>Chelidonichthys cuculus</i>). Faunal tracks and casts	Offshore circalittoral sand (SS.SSa.Osa)
13/09/2023	MCW-C-ST53	MCW-C-ST53	06:20:59	654 496.4	6 212 296.0	06:31:16	654 508.1	6 212 233.7	63.4	MCW-C-ST53_01 to MCW-C-ST53_13	Slightly gravelly sand with small scale ripples and shell fragments and sporadic cobbles	Sparse fauna inc. crab (Brachyura), starfish (<i>Asterias rubens</i>), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
13/09/2023	MCW-C-ST54	MCW-C-ST54	07:58:09	657 295.1	6 212 408.4	08:07:32	657 296.2	6 212 350.7	57.8	MCW-C-ST54_01 to MCW-C-ST54_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. fish (Osteichthyes). Faunal tracks and casts	Offshore circalittoral sand (SS.SSa.Osa)
17/09/2023	MCW-C-ST62	MCW-C-ST62	03:22:52	651 792.6	6 209 616.5	03:35:45	651 816.2	6 209 560.7	60.7	MCW-C-ST62_01 to MCW-C-ST62_15	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura), hermit crab (Paguroidea), starfish (Asteroidea), bryozoan (unattached <i>Fustra foliacea</i>), fish (Osteichthyes inc. Callionymidae, <i>Chelidonichthys cuculus</i>), flatfish (Pleuronectiformes). Empty <i>Arctica islandica</i> shells	Offshore circalittoral sand (SS.SSa.Osa)
17/09/2023	MCW-C-ST63	MCW-C-ST63	00:36:03	654 466.3	6 209 648.3	00:46:20	654 524.6	6 209 640.5	58.8	MCW-C-ST63_01 to MCW-C-ST63_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea), starfish (<i>Astropecten irregularis</i>), polychaete worm (Polychaeta), hydroid/bryozoan (Hydrozoa/Bryozoa), fish (Osteichthyes inc. Gadidae, Triglidae), flatfish (Pleuronectiformes). Empty <i>Arctica islandica</i> shells	Offshore circalittoral sand (SS.SSa.Osa)
17/09/2023	MCW-C-ST70	MCW-C-ST70	07:41:26	649 490.5	6 206 785.2	07:51:58	649 541.9	6 206 757.4	58.4	MCW-C-ST70_01 to MCW-C-ST70_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura inc. <i>Atelecyclus rotundatus</i>), polychaete worm (Polychaeta), faunal turf (Hydrozoa/Bryozoa). Empty <i>Arctica islandica</i> shells	Offshore circalittoral sand (SS.SSa.Osa)
17/09/2023	MCW-C-ST71	MCW-C-ST71	05:09:51	651 617.7	6 207 254.9	05:21:18	651 599.1	6 207 192.7	64.9	MCW-C-ST71_01 to MCW-C-ST71_13	Slightly gravelly sand with small	Sparse fauna inc. hermit crab (Paguroidea), starfish (<i>Asterias rubens</i>), faunal turf (Hydrozoa/Bryozoa), fish (Osteichthyes inc.	Offshore circalittoral sand (SS.SSa.Osa)

											scale ripples and shell fragments	Callionymidae), flatfish (Pleuronectiformes). Empty <i>Arctica islandica</i> shells	
17/09/2023	MCW-C-ST75	MCW-C-ST75	21:46:19	638 730.6	6 204 211.3	21:55:21	638 707.4	6 204 262.7	56.4	MCW-C-ST75_01 to MCW-C-ST75_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea), squid (Loliginidae), flatfish (Pleuronectiformes inc. <i>Pleuronectes platessa</i>), gadoid fish (Gadidae possibly <i>Trisopterus</i> sp.)	Offshore circalittoral sand (SS.SSa.Osa)
16/09/2023	MCW-C-ST77	MCW-C-ST77	16:52:41	644 161.0	6 204 241.8	17:01:37	644 126.4	6 204 198.7	55.2	MCW-C-ST77_01 to MCW-C-ST77_14	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea)	Offshore circalittoral sand (SS.SSa.Osa)
17/09/2023	MCW-C-ST79	MCW-C-ST79	19:08:33	649 121.6	6 204 505.9	19:17:55	649 108.3	6 204 449.6	57.9	MCW-C-ST79_01 to MCW-C-ST79_13	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura), plaice (<i>Pleuronectes platessa</i>), pogge (<i>Agonus cataphractus</i>). Empty <i>Arctica islandica</i> shells, possible <i>Arctica islandica</i> siphons	Offshore circalittoral sand (SS.SSa.Osa)
23/09/2023	MCW-C-ST83	MCW-C-ST83	09:33:51	638 745.9	6 201 691.6	09:44:19	638 780.5	6 201 642.1	60.3	MCW-C-ST83_01 to MCW-C-ST83_19	Coarse sediment with cobbles and boulders, interspersed with sand	Fauna dominated by brittlestars (Ophiuroidea inc. <i>Ophiothrix fragilis</i>). Other fauna observed inc. edible crab (<i>Cancer pagurus</i>), hermit crabs with associated anemones (<i>Pagurus prideaux</i> with associated <i>Calliactis palliata</i>), squat lobster (Galatheidae), anemones (Actiniaria), seven-armed starfish (<i>Luidia ciliaris</i>), sea snail (<i>Calliostoma</i> sp.), sea urchin (<i>Echinus esculentus</i>), sea squirts (Asciacea), soft coral (<i>Alcyonium digitatum</i>), cup corals (Caryophylliidae), serpulid worms (<i>Spirobranchus</i> sp.), sponges (Porifera), saddle oysters (Anomiidae), faunal turf (Hydrozoa/Bryozoa), fish (Osteichthyes)	Echinoderms and crustose communities (CR.MCR.EcCr)
23/09/2023	MCW-C-ST91	MCW-C-ST91	07:56:38	638 656.9	6 199 012.8	08:08:44	638 699.7	6 198 961.7	66.6	MCW-C-ST91_01 to MCW-C-ST91_17	Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments	Fauna inc. sponges (Porifera), anemones (Actiniaria inc. <i>Urticina</i> sp.), brittlestars (Ophiuroidea), sea urchins (<i>Echinus esculentus</i>), sea squirts (Asciacea), soft coral (<i>Alcyonium digitatum</i>), sea snail (<i>Calliostoma</i> sp.), serpulid worms (<i>Spirobranchus</i> sp.), faunal turf (Hydrozoa/Bryozoa inc. <i>Flustra foliacea</i>), barnacles (Sessilia). Faunal tubes	Offshore circalittoral coarse sediment (SS.SCS.OCS)
16/09/2023	MCW-C-ST92	MCW-C-ST92	12:26:49	641 227.4	6 199 153.9	12:35:39	641 258.7	6 199 198.1	54.2	MCW-C-ST92_01 to MCW-C-ST92_11	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. starfish (<i>Astropecten irregularis</i>). Faunal tubes	Offshore circalittoral sand (SS.SSa.Osa)
22/10/2023	MCW-D-ST64	MCW-D-ST64	21:18:09	656 999.0	6 209 828.9	21:35:52	656 971.0	6 209 724.2	108.4	MCW-D-ST64_01 to MCW-D-ST64_22	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (<i>Liocarcinus</i> sp.), hermit crabs (Paguroidea), faunal turf (Hydrozoa/Bryozoa). Fish (Osteichthyes inc. <i>Scomber scombrus</i>). Faunal burrows, tubes and casts	Offshore circalittoral sand (SS.SSa.Osa)
22/10/2023	MCW-D-ST72A	MCW-D-ST72A	23:18:31	654 858.6	6 206 718.1	23:37:30	654 815.2	6 206 616.1	110.8	MCW-D-ST72A_01 to MCW-D-ST72A_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura), hermit crabs (Paguroidea), shrimp (Caridea), squid (Loliginidae), hydroid/bryozoan (Hydrozoa/Bryozoa inc. unattached <i>Flustra foliacea</i>). Fish (Osteichthyes inc. Gobiidae), flatfish (Pleuronectiformes). Algae (<i>Laminaria</i> sp. debris and Rhodophyta debris). Faunal casts. Empty <i>Arctica islandica</i> shells	Offshore circalittoral sand (SS.SSa.Osa)

24/10/2023	MCW-D-ST73	MCW-D-ST73_1	12:39:34	657 309.5	6 206 853.3	12:42:04	657 323.7	6 206 850.3	14.6	MCW-D-ST73_01 to MCW-D-ST73_02	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. dragonet (<i>Callionymus lyra</i>)	Offshore circalittoral sand (SS.SSa.Osa)
		MCW-D-ST73_2	12:42:04	657 323.7	6 206 850.3	13:01:00	657 312.4	6 206 854.1	12.0	MCW-D-ST73_03 to MCW-D-ST73_39	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Fauna dominated by brittlestars (Ophiuroidea inc. <i>Ophiothrix fragilis</i>). Other fauna observed inc. crabs (Brachyura inc. <i>Cancer pagurus</i> , <i>Necora puber</i>), squat lobsters (<i>Munida</i> sp.), spider crab (Macropodia), starfish (Asteroidea inc. <i>Henricia</i> sp., <i>Marthasterias glacialis</i> , <i>Asterias rubens</i>), sea urchins (<i>Echinus esculentus</i>), soft coral (<i>Alcyonium digitatum</i>), cup corals (Caryophylliidae), faunal turf (Hydrozoa/Bryozoa inc. <i>Flustra foliacea</i> , Plumulariidae, Flustrina), scallop (<i>Pecten maximus</i>), barnacles (Sessilia). Fish (Osteichthyes), snakeblenny (<i>Lumpenus lampretaeformis</i>). Faunal tubes inc. Ampeliscidae tube masses	Mosaic of Offshore circalittoral coarse sediment (SS.SCS.OCS) with Echinoderms and crustose communities (CR.MCR.EcCr)
23/10/2023	MCW-D-ST80	MCW-D-ST80	02:59:14	651 951.8	6 204 318.1	03:18:12	652 043.0	6 204 251.7	112.8	MCW-D-ST80_01 to MCW-D-ST80_14	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crabs (Paguroidea), starfish (<i>Luidia sarsii</i>), brittlestar (Ophiuroidea), squid (Loliginidae). Fish (Osteichthyes inc. Gadidae, Callionymidae, <i>Chelidonichthys cuculus</i> , <i>Scomber scombrus</i>)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST81	MCW-D-ST81	01:11:08	654 425.1	6 204 405.4	01:29:54	654 400.9	6 204 296.4	111.6	MCW-D-ST81_01 to MCW-D-ST81_10	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. soft coral (<i>Alcyonium digitatum</i>), faunal turf (Hydrozoa/Bryozoa inc. <i>Flustra foliacea</i>). Fish (Osteichthyes inc. Callionymidae), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
24/10/2023	MCW-D-ST82	MCW-D-ST82_1	10:16:24	656 829.8	6 204 546.1	10:22:33	656 859.6	6 204 543.2	29.9	MCW-D-ST82_01 to MCW-D-ST82_14	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Fauna inc. sponges (Porifera), crabs (<i>Necora puber</i>), squat lobsters (<i>Munida</i> sp.), starfish (Asteroidea inc. <i>Henricia</i> sp., <i>Crossaster papposus</i> , <i>Marthasterias glacialis</i>), sea urchin (<i>Echinus esculentus</i>), soft coral (<i>Alcyonium digitatum</i>), cup corals (Caryophylliidae), sea squirts (Asciidae), bryozoan (Bryozoa), faunal turf (Hydrozoa/Bryozoa inc. <i>Flustra foliacea</i>), scallop (<i>Pecten maximus</i>), barnacles (Sessilia). Fish (Osteichthyes inc. Blenniidae)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
		MCW-D-ST82_2	10:22:33	656 859.6	6 204 543.2	10:50:01	657 023.4	6 204 536.5	163.9	MCW-D-ST82_15 to MCW-D-ST82_34	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura), faunal turf (Hydrozoa/Bryozoa inc. <i>Flustra foliacea</i>), scallop (Pectinidae). Fish (Osteichthyes inc. Callionymidae)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST86A	MCW-D-ST86A	05:57:31	647 290.6	6 201 713.4	06:16:57	647 381.2	6 201 645.4	113.2	MCW-D-ST86A_01 to MCW-D-ST86A_10	Sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), faunal turf (Hydrozoa/Bryozoa), possible sand eel (Ammodytidae). Fish (Osteichthyes inc. <i>Chelidonichthys cuculus</i> , <i>Scomber scombrus</i>), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
24/10/2023	MCW-D-ST88A	MCW-D-ST88A	07:06:05	651 487.2	6 201 952.9	07:24:54	651 595.3	6 201 934.8	109.6	MCW-D-ST88A_01 to MCW-D-ST88A_12	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. hermit crab (Paguroidea), squid (Loliginidae), faunal turf (Hydrozoa/Bryozoa), ray (Rajidae). Fish (Osteichthyes inc. Callionymidae, <i>Chelidonichthys cuculus</i>)	Offshore circalittoral sand (SS.SSa.Osa)
24/10/2023	MCW-D-ST89A	MCW-D-ST89A	08:29:42	654 049.2	6 202 156.0	08:47:48	654 137.0	6 202 095.2	106.8	MCW-D-ST89A_01 to MCW-D-ST89A_08	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura inc. <i>Corystes cassivelaunus</i>), brittlestar (Ophiuroidea)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST95A	MCW-D-ST95A	15:37:00	649 709.9	6 198 504.3	15:55:02	649 709.9	6 198 396.5	107.8	MCW-D-ST95A_01 to MCW-D-ST95A_17	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura)	Offshore circalittoral sand (SS.SSa.Osa)
17/10/2023	MCW-D-ST100A	MCW-D-ST100A	04:24:23	645 937.4	6 197 289.8	04:45:04	645 908.0	6 197 174.2	119.3	MCW-D-ST100A_01 to MCW-D-ST100A_10	Gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura), hermit crab (Paguroidea), squid (Loliginidae). Fish inc. red gurnard (<i>Chelidonichthys cuculus</i>), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST101	MCW-D-ST101	14:05:27	649 523.0	6 196 386.5	14:22:42	649 627.8	6 196 368.1	106.5	MCW-D-ST101_01 to MCW-D-ST101_18	Gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crab (Brachyura), hermit crab (Paguroidea), dragonet (Callionymidae)	Offshore circalittoral sand (SS.SSa.Osa)

											sporadic pebbles and cobbles		
17/10/2023	MCW-D-ST103A	MCW-D-ST103A	01:53:23	641 624.2	6 193 696.8	02:13:39	641 705.5	6 193 616.9	114.0	MCW-D-ST103A_01 to MCW-D-ST103A_09	Slightly gravelly sand with small scale ripples and shell fragments	Sparse fauna inc. crabs (Brachyura), hermit crabs (Paguroidea), bryozoa (Flustridae). Fish (Osteichthyes), flatfish (Pleuronectiformes)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST104	MCW-D-ST104	08:21:38	643 705.4	6 193 487.0	08:40:39	643 769.5	6 193 392.5	114.2	MCW-D-ST104_01 to MCW-D-ST104_13	Slightly gravelly sand with small scale ripples and shell fragment sporadic cobbles and a boulder	Sparse fauna inc. crabs (Brachyura), faunal turf (Hydrozoa/Bryozoa)	Offshore circalittoral sand (SS.SSa.Osa)
23/10/2023	MCW-D-ST108A	MCW-D-ST108A	11:11:21	646 195.7	6 191 655.0	11:28:33	646 252.1	6 191 564.7	106.5	MCW-D-ST108A_01 to MCW-D-ST108A_21	Gravel with shell fragments, cobbles and infrequent boulders	Sparse fauna inc. encrusting sponge (Porifera), crabs (Brachyura inc. Majoidea), hermit crabs (Paguroidea), starfish (Asteroidea), brittlestar (Ophiuroidea), sea squirts (Ascidiacea), barnacles (Sessilia), faunal turf (Hydrozoa/Bryozoa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
<p>Notes UTC = Coordinated Universal Time</p>													

Appendix D

Environmental Methods

D.1 Analysis of Photographic Data

To assess the habitats present within the survey area, detailed analysis of video and still photographic data was undertaken noting the locations of any observed changes in sediment type and/or associated faunal community. Where available, field grab sample descriptions were used to provide further information on sediment composition.

Taxa were recorded to the lowest possible taxonomic level. It should be noted that many species cannot be identified to low taxonomic level from photographic data alone and, as such, high taxonomic levels were used.

Descriptions of the substrate composition, corresponding to sediment changes, were undertaken for each video segment. These descriptions follow the EMODnet sediment classification (Kaskela et al., 2019), which is based on a reclassification of the Folk (1954) sediment classes and was developed to support the EUNIS habitat identification (Long, 2006) in conjunction with the Wentworth (1922) classification (Kaskela et al., 2019). Table G.4.1 presents a summary of the sediment particle sizes and corresponding classifications.

The Folk (1954) sediment classification was initially reclassified into four categories, namely 'coarse sediment', 'mixed sediment', 'mud and sandy mud' and 'sand and muddy sand' to be more aligned with the EUNIS classification. During this reclassification, elements of 'muddy sand' were contained within both latter categories (Long, 2006). For the purposes of this habitat assessment, aligned with the EMODnet substrate classification scheme, 'mud to muddy sand' and 'sand' are considered separately, with the former including the sub-categories 'mud', 'sandy mud' and 'muddy sand' (Kaskela et al., 2019). The Folk categories and sub-categories are defined by the proportions of 'mud', 'sand' and 'gravel'. For example, a description of muddy sand defines sediments that have sand as the principal component (50 % to 90 %) with a secondary component of mud (10 % to 50 %) and < 5 % gravel (Kaskela et al., 2019). The EMODnet Geology Consortium further revised the above categories to include the category 'rock and boulders' (Kaskela et al., 2019), which includes the Wentworth (1922) categories boulders and cobbles. The presence of shell fragments and observed anthropogenic features were also noted.

Table G.4.1: Sediment particle size and classification terms

Particle Size	Wentworth (1922)	Folk (1954)	Folk, 5 classes (Kaskela et al., 2019)			
> 256 mm	Boulder	Gravel	Rock and boulders			
64 mm to 256 mm	Cobble					
32 mm to < 64 mm	Pebbles		Coarse sediment:	Mixed sediment:	Mud to muddy sand*:	Sand:
16 mm to < 32 mm			(Gravel ≥ 80 %, or Gravel ≥ 5 %	(Mud ≥ 10 % - 95 % Sand < 90 % Gravel ≥ 5%)	(Mud 10 % - 95 % Sand < 90 % Gravel < 5 %)	(Mud < 10 % Sand ≥ 90 % Gravel < 5%)
8 mm to < 16 mm						
4 mm to < 8 mm						
2 mm to < 4 mm	Granules					

Particle Size	Wentworth (1922)	Folk (1954)	Folk, 5 classes (Kaskela et al., 2019)			
1 mm to < 2 mm	Very coarse sand	Sand	and Sand ≥ 90 %			
0.5 mm to < 1 mm	Coarse sand					
0.25 mm to < 0.5 mm	Medium sand					
0.125 mm to < 0.25 mm	Fine sand					
62.5 µm to 0.125 mm	Very fine sand					
> 4 µm to 62.5 µm	Silt	Mud	-			
> 1 µm to 4 µm	Clay					
Notes * = Mud to muddy sand includes: Mud (Mud ≥ 90 %, Sand < 10 %, Gravel < 5%); Sandy mud (Mud 50 % to 90 %, Sand 10 % to 50 %, Gravel < 5%); Muddy sand (Mud 10 % to 50 %, Sand 50 % to 90 %, Gravel < 5%) (Kaskela et al., 2019)						

D.2 Analysis of Grab Data

Sediment samples were analysed for their PSD using a combination of two techniques; sieve analysis for all material retained by a 1.0 mm sieve followed by laser diffraction analysis of the finer material. The PSD parameters include the descriptive statistics derived in Gradstat (Blott, 2010) and based on the Folk and Ward (1957) method. The sediment descriptions are based on the Wentworth (1922) scale and the British Geological Survey (BGS) modified Folk classification (Long, 2006).

D.3 Sensitive Habitats and Species

D.3.1 Stony Reef

When considering the potential of an area as the Annex I habitat 'Stony reef', the composition of the substrate is an important characteristic. Stony reef is defined as comprising coarse sediments with a diameter more than 64 mm (cobbles and boulders) that provide a hard substratum. The relationship between the coarse material and sediment in which it lies is integral in determining 'reefiness'. Matrix (soft sediment) supported material is likely to have a patchier distribution than clast (coarse sediment) supported and so have lower 'reefiness'; additionally, matrix supported material is likely to have a larger infaunal component which again reduces its 'reefiness' (Irving, 2009). Reefs are also defined as having relief from the seafloor, and as such relief is used as another criterion for assessment. The epifaunal community of potential reef habitat is also a key determinant of its 'reefiness' and proportion of epifauna species to infaunal species is therefore included as an assessment criterion. Within the Irving (2009) scheme, areas of potential stony reef habitat must have an area of more than 25 m² to be classified as reef; this report also adopts this minimum area, with area of features of interest taken into account during initial selection of the transect

locations. Table G.4.2 presents the Irving (2009) criteria of 'reefiness' for stony reef habitat assessments. Table G.4.3 presents the stony reef matrix used to assess the overall 'reefiness' of an area.

Table G.4.2: Measures of 'reefiness' for stony reef habitat (Irving, 2009)

Characteristic	Resemblance to a 'Stony Reef'			
	Not a reef	Low	Medium	High
Composition Diameter of cobbles/boulders being greater than 64 mm. Percentage cover relates to a minimum area of 25 m ² . The 'composition' characteristic also includes 'patchiness'.	< 10 %	10 % - 40 %	40 % - 95 %	> 95 %
Elevation Minimum height (64 mm) relates to minimum size constituent cobbles. This characteristic could also include 'distinctness' from the surrounding seafloor. Note that two units (mm and m) are used	Flat seafloor	< 64 mm	64 mm – 5 m	> 5 m
Extent	< 25 m ²	> 25 m ²		
Biota	Dominated by infaunal species	-	-	> 80 % of species present composed of epifaunal species
Notes When determining whether an area of the seafloor should be considered as Annex I stony reef, if a 'low' is scored in any of the four characteristics (composition, elevation, extent, or biota), then a strong justification would be required for this area to be considered as contributing to the Marine Natura site network of qualifying reefs in terms of the EU Habitats Directive. Adapted from Irving (2009)				

Table G.4.3: Stony reef matrix

Reef Structure	Composition (% of Seafloor Comprised of Cobbles/Boulders)				Biota
	< 10	10 – 40	40 – 95	> 95	
Flat seafloor	Not a reef	Not a reef	Not a reef	Not a reef	Infauna dominated
< 64 mm	Not a reef	Low	Low	Low	-
64 mm – 5 m	Not a reef	Low	Medium	Medium	-
> 5 m	Not a reef	Low	Medium	High	> 80 %
Notes Full reef assessment not applicable of areas of cobble and/or boulders with an extent of < 25 m ² , which would be classified as 'Not a Reef'					

D.3.2 Epifaunal Counts

To assess the abundance and density of the epifauna on stony reefs assigned a reefiness category 'low' or higher, visible epifaunal taxa were enumerated separately for each section. Counts were then converted to the superabundant, abundant, common, frequent, occasional, rare (SACFOR) abundance scale (Appendix H) used by JNCC to semi-quantitatively record the abundance and density of marine benthic flora and fauna (JNCC, 2015). When assessing density, the SACFOR scale converts 'numbers per m²' to an abundance category with consideration of the size class of the species.

Table G.4.4: SACFOR scale

% cover scale	Growth form		Size of individuals/colonies				Density scale	
	Crust/ Meadow	Massive/ Turf	< 1 cm	1 - 3 cm	3 – 15 cm	> 15 cm		
> 80 %	S		S				> 1/0.001 m ² (1x1 cm)	> 10,000/m ²
40 – 79 %	A	S	A	S			1-9/0.001 m ²	1000-9999/m ²
20 -39 %	C	A	C	A	S		1-9/0.01 m ² (10 x 10 cm)	100-999/m ²
10 – 19 %	F	C	F	C	A	S	1-9/0.1 m ²	0-99/m ²
5 – 9 %	O	F	O	F	C	A	1-9/10 m ²	
1 – 5 % or density	R	O	R	O	F	C	1-9/10m ² (3.16 x 3.16 m)	
< 1 % or density	x	R		R	O	F	1-9/100 m ² (10 x 10 m)	
					R	O	1-9/1000 m ² (31.6 x 31.6 m)	
						R	< 1/1000 m ²	
Key								
R = Rare	O = Occasional	F = Frequent	C = Common	A = Abundant	S= Superabundant			


Appendix E


Sediment Particle Size Data

Certificate of Analysis



Certificate Number	EP/23/5069	Revision Number	0
Job Number	210836		
Job Reference	SPR MachairWind		
Prepared For	Prepared By		
SPR	Adam Burtonshaw Fugro GB Marine Limited Trafalgar Wharf (Unit 16) Hamilton Road Portchester Portsmouth PO6 4PX United Kingdom		
	Phone: +44 (0) 2392 205500 Web: www.fugro.com		

Sampling Undertaken By	FGBML	Sampling Date	07/09/2023 – 24/10/2023
Date of Receipt	15/11/2023	Date of Analysis	20/11/2023 – 30/11/2023
Sample Matrix	Marine Sediments		
Method Reference	Particle Size Distribution by Dry Sieving – UK-SED-TCH-WI-001 based on NMBAQC's Best Practice Guidance - Particle Size Analysis (PSA) for Supporting Biological Analysis 2022 and UK-SED-TCH-WI-002 based on BS 1377: Part 1: 2016 and Part 2: 1990 (withdrawn). Particle Size Distribution by Laser Diffraction – UK-SED-TCH-WI-006 based on NMBAQC's Best Practice Guidance - Particle Size Analysis (PSA) for Supporting Biological Analysis 2022 and BS ISO 13320: 2020.		
Test Results	Refer to pages 2-6 of 6 Refer to Excel results file for laser diffraction metadata.		
Laboratory Comments	Deviating Codes: None		
Authorised Signature			
Name	James Hutchinson		
Position	Sediment Laboratory Manager		
Issue Date	21/12/2023		

<ul style="list-style-type: none"> • Further information on methods of analysis may be obtained from the above address • Opinions and interpretations expressed herein are outside the scope of UKAS accreditation • Test results reported relate only to those items tested • Test results reported specifically refer to sample(s) tested as received unless otherwise stated • ^{S*}Indicates subcontracted test • ^{D*}Indicates relevant Deviating Code applies to test results 	<p>A UKAS TESTING LABORATORY</p> 
Registered in England: Fugro House, Hithercroft Road, Wallingford, Oxfordshire, OX10 9RB, UK Registered in England No. 1135456 VAT No. GB 579 3459 84	



TEST RESULTS

Test Results: Particle Size Distribution by Dry Sieving (63000 - 1000 µm) and Laser Diffraction (< 1000 - < 0.98 µm) @ 0.5 Phi Intervals
Job Number: 210836
Job Reference: SPR MachairWind

SAMPLE ID:	MCW-A-ST01	MCW-A-ST02	MCW-A-ST03	MCW-A-ST05	MCW-A-ST07A	MCW-A-ST08A	MCW-A-ST12	MCW-A-ST14	MCW-A-ST22	MCW-A-ST34	MCW-A-ST36	MCW-A-ST44A	MCW-A-ST55
LAB ID:	WL043345	WL043346	WL043347	WL043348	WL043349	WL043350	WL043351	WL043352	WL043353	WL043354	WL043355	WL043356	WL043357
Aperture [µm]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]
63000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11200	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.43	0.00	0.00	0.00	0.00
8000	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.00	0.00	0.00
4000	0.02	0.00	0.09	0.00	0.00	0.31	0.02	0.00	0.16	0.00	0.00	0.00	0.00
2800	0.04	0.00	0.03	0.01	0.06	0.21	0.04	0.00	0.10	0.00	0.03	0.00	0.03
2000	0.02	0.01	0.04	0.04	0.15	0.26	0.02	0.00	0.04	0.05	0.04	0.01	0.02
1400	0.03	0.02	0.16	0.05	0.30	0.96	0.07	0.03	0.04	0.05	0.10	0.05	0.03
1000	0.08	0.03	0.55	0.08	0.32	1.78	0.10	0.03	0.09	0.07	0.13	0.08	0.07
707.11	0.00	0.00	0.98	0.00	0.00	2.52	0.00	0.00	0.00	0.00	0.76	0.07	0.00
500.00	0.03	0.01	3.11	0.07	0.11	13.05	0.13	1.13	0.00	0.80	10.28	5.22	2.44
353.55	4.39	2.49	10.17	5.33	5.08	29.29	5.94	13.95	1.63	10.83	28.52	25.65	15.83
250.00	20.24	15.39	21.67	22.58	21.84	32.40	23.58	36.71	15.41	30.96	35.23	40.38	33.33
176.78	34.97	32.46	27.91	36.40	36.14	16.39	36.53	35.43	36.41	36.33	20.53	24.28	32.45
125.00	28.68	30.78	21.09	27.09	27.35	2.40	26.11	12.07	31.78	18.23	4.31	4.23	14.17
88.39	10.15	12.57	8.22	8.09	8.24	0.00	7.30	0.64	9.46	2.64	0.06	0.03	1.62
62.50	0.61	1.24	0.82	0.25	0.25	0.00	0.16	0.00	0.38	0.00	0.00	0.00	0.00
44.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.25	0.00	0.05	0.17	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
22.10	0.00	0.72	0.70	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00
15.63	0.00	0.78	0.62	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
11.05	0.00	0.41	0.42	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
7.81	0.05	0.34	0.47	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
5.52	0.19	0.55	0.64	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
3.91	0.23	0.70	0.71	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00
2.76	0.18	0.65	0.63	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
1.95	0.11	0.46	0.45	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
1.38	0.00	0.27	0.27	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
0.98	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
< 0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00





TEST RESULTS

Test Results: Particle Size Distribution by Dry Sieving (63000 - 1000 µm) and Laser Diffraction (< 1000 - < 0.98 µm) @ 0.5 Phi Intervals
Job Number: 210836
Job Reference: SPR MachairWind

SAMPLE ID:	MCW-B-ST09A	MCW-B-ST10	MCW-B-ST17A	MCW-B-ST18A	MCW-B-ST19A	MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57	MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31
LAB ID:	WL043358	WL043359	WL043360	WL043361	WL043362	WL043363	WL043364	WL043365	WL043366	WL043367	WL043368	WL043369	WL043370
Aperture [µm]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]
63000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8000	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
5600	0.00	0.05	0.00	0.00	0.00	0.22	0.07	0.00	0.00	0.00	0.00	0.00	0.00
4000	0.00	0.00	0.00	0.00	0.04	0.00	0.05	0.12	0.01	0.00	0.10	0.00	0.05
2800	0.00	0.01	0.00	0.00	0.02	0.00	0.02	0.10	0.05	0.11	0.03	0.04	0.04
2000	0.00	0.03	0.00	0.01	0.02	0.03	0.01	0.09	0.09	0.02	0.07	0.07	0.11
1400	0.02	0.09	0.02	0.09	0.04	0.05	0.02	0.04	0.08	0.03	0.12	0.13	0.11
1000	0.04	0.22	0.06	0.23	0.05	0.11	0.06	0.05	0.16	0.10	0.15	0.12	0.11
707.11	3.10	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.29	0.00	0.27	0.00	0.09
500.00	5.75	0.74	0.33	0.44	0.77	0.21	0.02	2.29	2.08	2.65	2.78	3.30	5.84
353.55	9.81	8.27	5.27	6.73	10.86	4.26	2.26	12.43	8.70	15.46	10.84	15.51	24.37
250.00	15.40	23.61	18.54	21.23	30.15	16.84	16.05	26.14	20.67	32.15	23.25	29.50	37.24
176.78	19.68	32.98	31.35	32.32	35.48	30.63	34.71	30.78	29.49	32.18	29.39	30.39	25.36
125.00	18.54	24.73	28.97	26.87	19.09	29.99	30.19	20.87	25.04	15.14	21.35	17.01	6.53
88.39	11.89	8.75	13.59	11.04	3.45	15.04	10.16	6.82	11.28	2.17	7.54	3.90	0.15
62.50	4.60	0.47	1.77	1.04	0.04	2.31	0.60	0.27	1.39	0.00	0.46	0.03	0.00
44.19	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.25	0.43	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.17	0.00	0.00
22.10	0.99	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.71	0.00	0.00
15.63	1.17	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.55	0.00	0.00
11.05	1.08	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.30	0.00	0.00
7.81	1.10	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.02	0.00	0.33	0.00	0.00
5.52	1.24	0.00	0.02	0.00	0.00	0.04	0.66	0.00	0.14	0.00	0.47	0.00	0.00
3.91	1.28	0.00	0.03	0.00	0.00	0.07	0.80	0.00	0.17	0.00	0.49	0.00	0.00
2.76	1.14	0.00	0.03	0.00	0.00	0.06	0.74	0.00	0.14	0.00	0.38	0.00	0.00
1.95	0.82	0.00	0.01	0.00	0.00	0.03	0.52	0.00	0.06	0.00	0.22	0.00	0.00
1.38	0.49	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.01	0.00	0.00
0.98	0.29	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
< 0.98	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00





TEST RESULTS

Test Results: Particle Size Distribution by Dry Sieving (63000 - 1000 µm) and Laser Diffraction (< 1000 - < 0.98 µm) @ 0.5 Phi Intervals
Job Number: 210836
Job Reference: SPR MachairWind

SAMPLE ID:	MCW-C-ST32	MCW-C-ST41	MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70	MCW-C-ST71	MCW-C-ST75
LAB ID:	WL043371	WL043372	WL043373	WL043374	WL043375	WL043376	WL043377	WL043378	WL043379	WL043380	WL043381	WL043382	WL043383
Aperture [µm]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]
63000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
5600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4000	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.01	0.00	0.03	0.00	0.04
2800	0.00	0.05	0.05	0.01	0.04	0.04	0.03	0.04	0.00	0.04	0.01	0.02	0.02
2000	0.04	0.13	0.02	0.04	0.02	0.04	0.02	0.02	0.04	0.02	0.01	0.05	0.17
1400	0.02	0.33	0.05	0.05	0.04	0.07	0.05	0.04	0.04	0.05	0.02	0.05	0.10
1000	0.04	0.69	0.05	0.07	0.06	0.06	0.07	0.06	0.05	0.06	0.02	0.04	0.06
707.11	0.00	2.70	0.69	0.27	0.00	0.02	0.13	0.57	0.00	0.25	0.00	0.33	0.00
500.00	1.62	15.14	11.07	7.57	0.07	0.82	1.98	3.90	0.49	1.39	0.52	2.69	0.15
353.55	11.07	29.99	30.80	26.26	4.80	6.95	9.12	11.19	6.50	7.29	7.98	10.80	7.25
250.00	25.80	31.03	35.86	36.65	21.39	21.38	21.88	20.87	22.25	20.18	26.03	24.14	30.13
176.78	31.94	16.67	18.50	23.35	36.41	32.97	30.72	26.67	34.84	31.04	36.46	31.31	40.42
125.00	22.03	3.29	2.92	5.60	28.26	26.86	24.93	22.80	26.79	26.82	23.47	22.73	19.44
88.39	7.16	0.00	0.00	0.11	8.65	10.14	10.12	11.71	8.67	11.60	5.40	7.60	2.14
62.50	0.27	0.00	0.00	0.00	0.26	0.67	0.92	2.12	0.31	1.25	0.05	0.23	0.00
44.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
< 0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00





TEST RESULTS

Test Results: Particle Size Distribution by Dry Sieving (63000 - 1000 µm) and Laser Diffraction (< 1000 - < 0.98 µm) @ 0.5 Phi Intervals
Job Number: 210836
Job Reference: SPR MachairWind

SAMPLE ID:	MCW-C-ST77	MCW-C-ST79	MCW-C-ST91	MCW-C-ST92	MCW-D-ST64	MCW-D-ST72A	MCW-D-ST73	MCW-D-ST80	MCW-D-ST81	MCW-D-ST82	MCW-D-ST86A
LAB ID:	WL043384	WL043385	WL043386	WL043387	WL043388	WL043389	WL043390	WL043391	WL043392	WL043393	WL043394
Aperture [µm]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]
63000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31500	0.00	0.00	17.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22400	0.00	0.00	30.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16000	0.00	0.00	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11200	0.00	0.00	5.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8000	0.00	0.00	2.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5600	0.00	0.00	2.12	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
4000	0.00	0.04	1.44	0.00	0.00	0.00	0.06	0.08	0.00	0.02	0.00
2800	0.11	0.00	1.56	0.00	0.07	0.00	0.01	0.01	0.02	0.14	0.00
2000	0.09	0.01	1.43	0.01	0.01	0.01	0.11	0.01	0.07	0.22	0.00
1400	0.17	0.02	1.48	0.04	0.04	0.04	0.12	0.02	0.10	0.70	0.04
1000	0.18	0.01	1.46	0.09	0.04	0.04	0.17	0.03	0.10	1.19	0.02
707.11	0.28	0.11	1.72	0.03	1.56	0.75	1.33	0.14	1.72	6.65	0.08
500.00	6.85	3.34	4.02	3.75	5.04	2.85	4.82	2.13	5.67	19.30	4.09
353.55	21.73	14.53	6.68	22.08	11.60	9.70	12.72	10.61	14.30	29.79	19.12
250.00	32.17	28.93	7.02	40.25	20.14	21.61	23.04	25.05	24.88	26.80	34.87
176.78	26.18	31.42	4.07	27.80	25.45	29.70	27.67	32.26	27.53	13.01	30.01
125.00	10.96	17.90	0.90	5.85	22.04	24.17	20.93	22.46	17.76	2.19	11.02
88.39	1.30	3.67	0.00	0.10	11.65	10.13	8.48	6.84	5.31	0.00	0.75
62.50	0.00	0.02	0.00	0.00	2.35	0.99	0.53	0.13	0.14	0.00	0.00
44.19	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00
15.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00
11.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00
3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00
2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
< 0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00





TEST RESULTS

Test Results: Particle Size Distribution by Dry Sieving (63000 - 1000 µm) and Laser Diffraction (< 1000 - < 0.98 µm) @ 0.5 Phi Intervals
Job Number: 210836
Job Reference: SPR MachairWind

SAMPLE ID:	MCW-D-ST88A	MCW-D-ST89A	MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST101	MCW-D-ST103A	MCW-D-ST104	MCW-D-ST108A
LAB ID:	WL043395	WL043396	WL043397	WL043398	WL043399	WL043400	WL043401	WL043402
Aperture [µm]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]	Fractional [%]
63000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.66
22400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.59
16000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.73
11200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.60
8000	0.00	0.00	0.00	0.00	0.13	0.00	0.00	7.34
5600	0.00	0.00	0.00	0.00	1.15	0.00	0.00	6.20
4000	0.00	0.00	0.00	0.52	1.59	0.00	0.08	3.90
2800	0.04	0.02	0.04	2.93	4.15	0.01	0.27	2.69
2000	0.01	0.13	0.05	11.27	9.61	0.03	2.14	1.75
1400	0.02	0.30	0.13	25.52	16.99	0.08	6.91	1.93
1000	0.07	0.69	0.33	24.41	17.89	0.23	10.13	1.54
707.11	2.49	8.84	6.47	5.98	12.69	0.60	6.09	1.21
500.00	8.99	19.88	24.60	6.89	13.11	4.99	13.52	2.40
353.55	18.82	27.21	36.66	7.03	10.48	17.63	21.25	3.24
250.00	26.67	24.82	25.15	6.65	7.03	31.87	22.20	3.01
176.78	24.79	14.24	6.45	5.01	3.75	29.98	13.65	1.75
125.00	13.59	3.80	0.11	2.43	1.30	13.16	3.69	0.45
88.39	3.04	0.06	0.00	0.45	0.14	1.41	0.07	0.00
62.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44.19	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
31.25	0.18	0.00	0.00	0.17	0.00	0.00	0.00	0.00
22.10	0.25	0.00	0.00	0.15	0.00	0.00	0.00	0.00
15.63	0.13	0.00	0.00	0.10	0.00	0.00	0.00	0.00
11.05	0.08	0.00	0.00	0.10	0.00	0.00	0.00	0.00
7.81	0.18	0.00	0.00	0.12	0.00	0.00	0.00	0.00
5.52	0.24	0.00	0.00	0.11	0.00	0.00	0.00	0.00
3.91	0.23	0.00	0.00	0.09	0.00	0.00	0.00	0.00
2.76	0.16	0.00	0.00	0.03	0.00	0.00	0.00	0.00
1.95	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
< 0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00



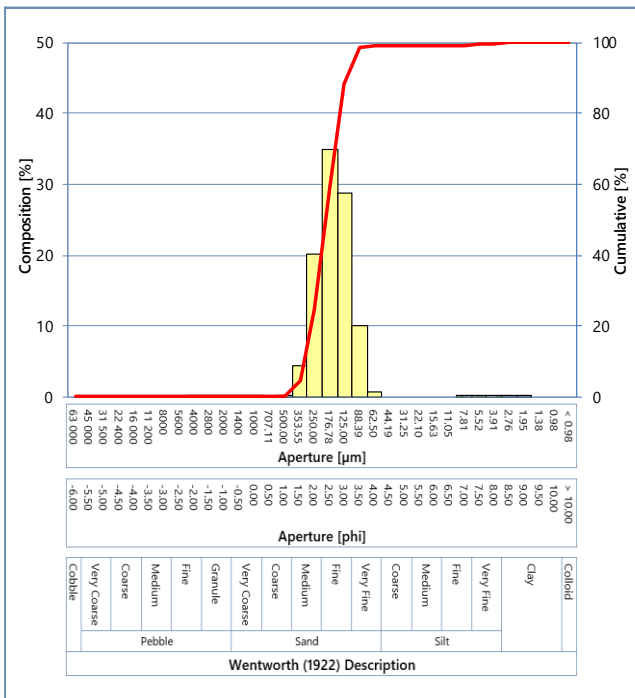
STATION: MCW-A-ST01



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.02	0.02
2800	-1.50	0.04	0.06
2000	-1.00	0.02	0.08
1400	-0.50	0.03	0.10
1000	0.00	0.08	0.18
707.11	0.50	0.00	0.18
500.00	1.00	0.03	0.21
353.55	1.50	4.39	4.60
250.00	2.00	20.24	24.84
176.78	2.50	34.97	59.81
125.00	3.00	28.68	88.49
88.39	3.50	10.15	98.64
62.50	4.00	0.61	99.25
44.19	4.50	0.00	99.25
31.25	5.00	0.00	99.25
22.10	5.50	0.00	99.25
15.63	6.00	0.00	99.25
11.05	6.50	0.00	99.25
7.81	7.00	0.05	99.29
5.52	7.50	0.19	99.48
3.91	8.00	0.23	99.70
2.76	8.50	0.18	99.89
1.95	9.00	0.11	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	195	Fine sand
Median [phi]*	2.36	
Mean [µm]*†	196	Fine sand
Mean [phi]*†	2.35	
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.56	
Skewness [µm]†	-0.02	Symmetrical
Skewness [phi]†	0.02	
Gravel [%]‡	0.08	Sand
Sand [%]‡	99.17	
Fines [%]‡	0.75	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-A-ST02

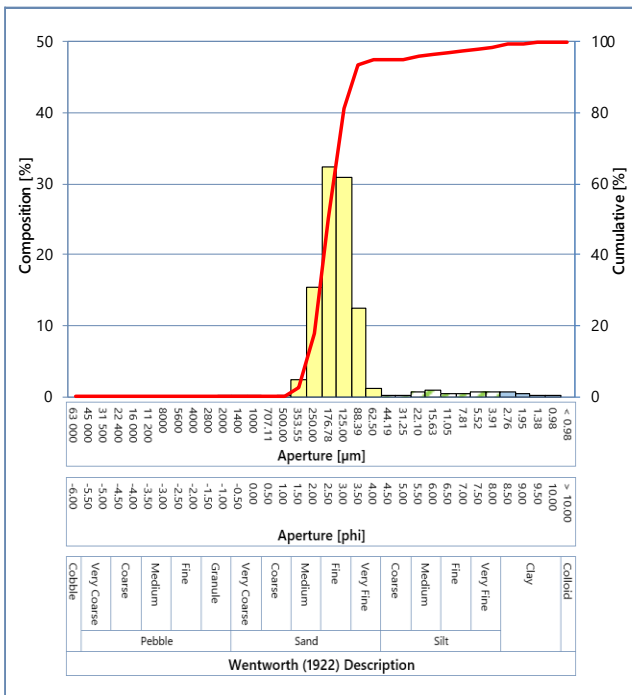
No photograph available



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.01	0.01
1400	-0.50	0.02	0.03
1000	0.00	0.03	0.06
707.11	0.50	0.00	0.06
500.00	1.00	0.01	0.06
353.55	1.50	2.49	2.55
250.00	2.00	15.39	17.94
176.78	2.50	32.46	50.40
125.00	3.00	30.78	81.19
88.39	3.50	12.57	93.76
62.50	4.00	1.24	95.00
44.19	4.50	0.00	95.00
31.25	5.00	0.05	95.05
22.10	5.50	0.72	95.77
15.63	6.00	0.78	96.55
11.05	6.50	0.41	96.96
7.81	7.00	0.34	97.30
5.52	7.50	0.55	97.85
3.91	8.00	0.70	98.54
2.76	8.50	0.65	99.19
1.95	9.00	0.46	99.65
1.38	9.50	0.27	99.93
0.98	10.00	0.07	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	178	Fine sand
Median [phi]*	2.49	
Mean [µm]*†	175	Fine sand
Mean [phi]*†	2.51	
Sorting [µm]†	1.58	Moderately well sorted
Sorting [phi]†	0.66	
Skewness [µm]†	-0.15	Fine skewed
Skewness [phi]†	0.15	
Gravel [%]‡	0.01	Sand
Sand [%]‡	95.00	
Fines [%]‡	5.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

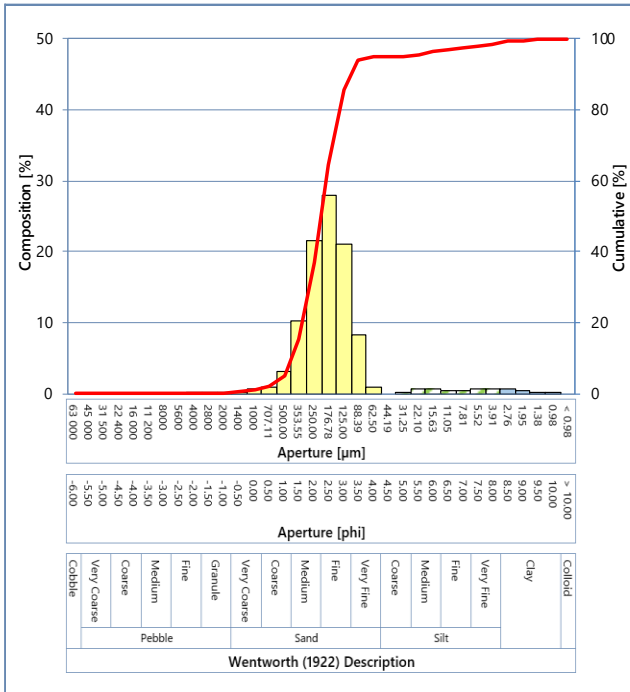
STATION: MCW-A-ST03



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.09	0.09
2800	-1.50	0.03	0.12
2000	-1.00	0.04	0.16
1400	-0.50	0.16	0.32
1000	0.00	0.55	0.87
707.11	0.50	0.98	1.85
500.00	1.00	3.11	4.96
353.55	1.50	10.17	15.14
250.00	2.00	21.67	36.81
176.78	2.50	27.91	64.72
125.00	3.00	21.09	85.82
88.39	3.50	8.22	94.04
62.50	4.00	0.82	94.86
44.19	4.50	0.00	94.86
31.25	5.00	0.17	95.02
22.10	5.50	0.70	95.72
15.63	6.00	0.62	96.34
11.05	6.50	0.42	96.76
7.81	7.00	0.47	97.23
5.52	7.50	0.64	97.87
3.91	8.00	0.71	98.58
2.76	8.50	0.63	99.21
1.95	9.00	0.45	99.66
1.38	9.50	0.27	99.93
0.98	10.00	0.07	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	212	Fine sand
Median [phi]*	2.24	
Mean [µm]*†	212	Fine sand
Mean [phi]*†	2.24	
Sorting [µm]†	1.94	Moderately sorted
Sorting [phi]†	0.95	
Skewness [µm]†	-0.19	Fine skewed
Skewness [phi]†	0.19	
Gravel [%]‡	0.16	Sand
Sand [%]‡	94.70	
Fines [%]‡	5.14	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-A-ST05

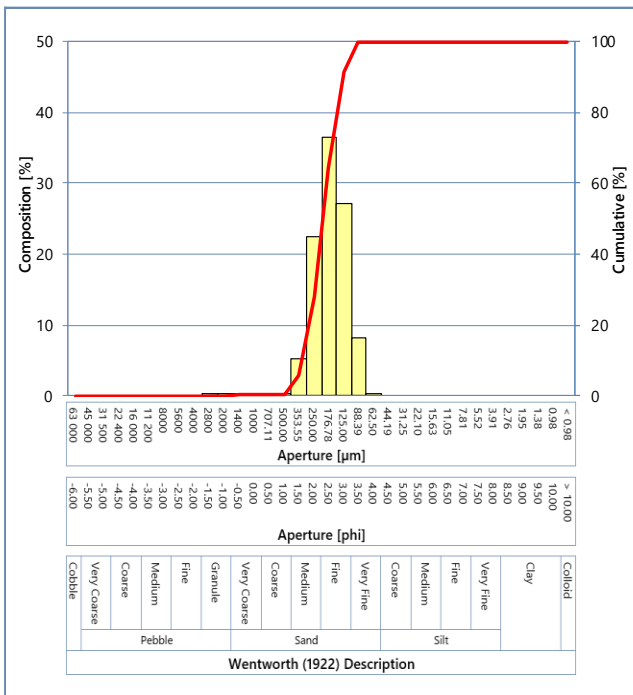


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.01	0.01
2000	-1.00	0.04	0.06
1400	-0.50	0.05	0.11
1000	0.00	0.08	0.18
707.11	0.50	0.00	0.18
500.00	1.00	0.07	0.25
353.55	1.50	5.33	5.58
250.00	2.00	22.58	28.17
176.78	2.50	36.40	64.57
125.00	3.00	27.09	91.66
88.39	3.50	8.09	99.75
62.50	4.00	0.25	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm] [†]	213	Fine sand
Mode 2 [µm] [†]	-	-
Mode 3 [µm] [†]	-	-
Median [µm] [†]	203	Fine sand
Median [phi] [†]	2.30	Fine sand
Mean [µm] ^{†‡}	204	Fine sand
Mean [phi] ^{†‡}	2.30	Fine sand
Sorting [µm] [†]	1.46	Moderately well sorted
Sorting [phi] [†]	0.55	
Skewness [µm] [†]	-0.01	Symmetrical
Skewness [phi] [†]	0.01	
Gravel [%] [#]	0.06	Sand
Sand [%] [#]	99.94	
Fines [%] [#]	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



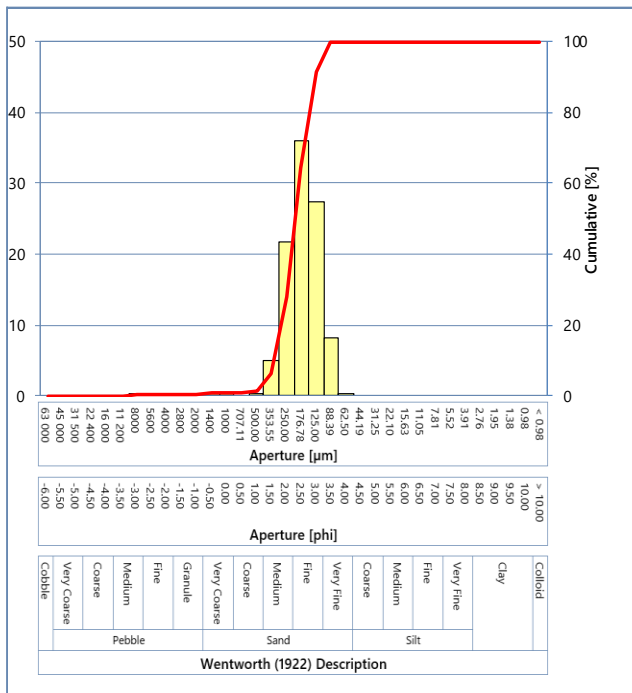
STATION: MCW-A-ST07A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.17	0.17
5600	-2.50	0.00	0.17
4000	-2.00	0.00	0.17
2800	-1.50	0.06	0.22
2000	-1.00	0.15	0.37
1400	-0.50	0.30	0.67
1000	0.00	0.32	0.99
707.11	0.50	0.00	0.99
500.00	1.00	0.11	1.10
353.55	1.50	5.08	6.18
250.00	2.00	21.84	28.02
176.78	2.50	36.14	64.16
125.00	3.00	27.35	91.51
88.39	3.50	8.24	99.75
62.50	4.00	0.25	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	202	Fine sand
Median [phi]*	2.30	
Mean [µm]*†	203	Fine sand
Mean [phi]*†	2.30	
Sorting [µm]†	1.48	Moderately well sorted
Sorting [phi]†	0.56	
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	
Gravel [%]‡	0.37	Sand
Sand [%]‡	99.63	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

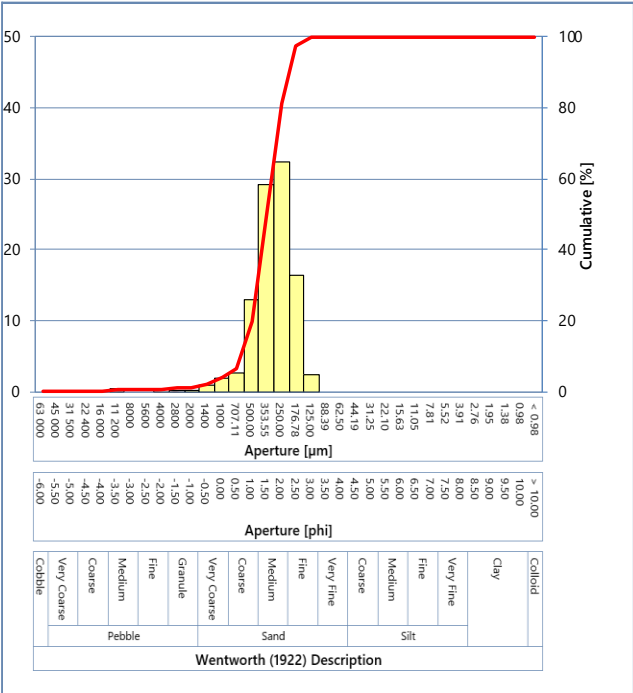
STATION: MCW-A-ST08A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.44	0.44
8000	-3.00	0.00	0.44
5600	-2.50	0.00	0.44
4000	-2.00	0.31	0.74
2800	-1.50	0.21	0.95
2000	-1.00	0.26	1.22
1400	-0.50	0.96	2.17
1000	0.00	1.78	3.95
707.11	0.50	2.52	6.47
500.00	1.00	13.05	19.52
353.55	1.50	29.29	48.81
250.00	2.00	32.40	81.21
176.78	2.50	16.39	97.60
125.00	3.00	2.40	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	349	Medium sand
Median [phi]*	1.52	
Mean [µm]*†	356	Medium sand
Mean [phi]*†	1.49	
Sorting [µm]†	1.56	Moderately well sorted
Sorting [phi]†	0.64	
Skewness [µm]†	0.13	Coarse skewed
Skewness [phi]†	-0.13	
Gravel [%]†	1.22	Sand
Sand [%]†	98.78	
Fines [%]†	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-A-ST12

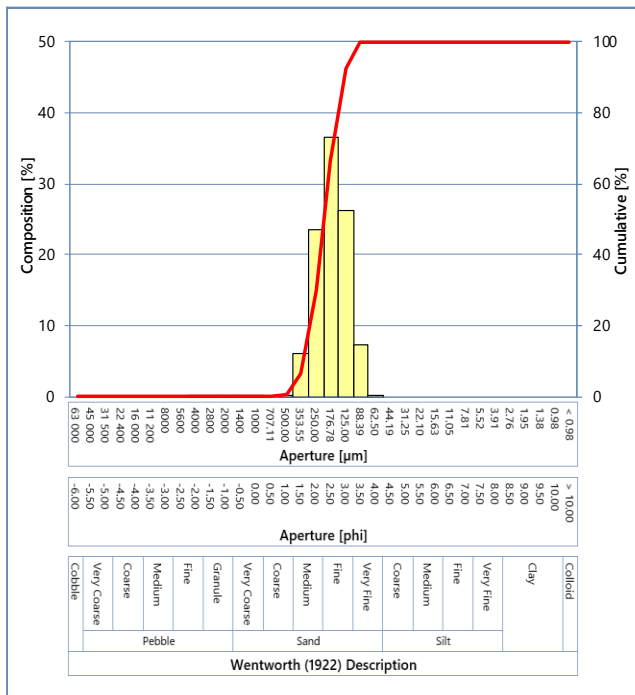


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.02	0.02
2800	-1.50	0.04	0.06
2000	-1.00	0.02	0.09
1400	-0.50	0.07	0.16
1000	0.00	0.10	0.25
707.11	0.50	0.00	0.25
500.00	1.00	0.13	0.38
353.55	1.50	5.94	6.32
250.00	2.00	23.58	29.90
176.78	2.50	36.53	66.43
125.00	3.00	26.11	92.54
88.39	3.50	7.30	99.84
62.50	4.00	0.16	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	207	Fine sand
Median [phi]*	2.28	
Mean [µm]*†	207	Fine sand
Mean [phi]*†	2.27	
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.55	
Skewness [µm]†	0.00	Symmetrical
Skewness [phi]†	0.00	
Gravel [%]‡	0.09	Sand
Sand [%]‡	99.91	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-A-ST14

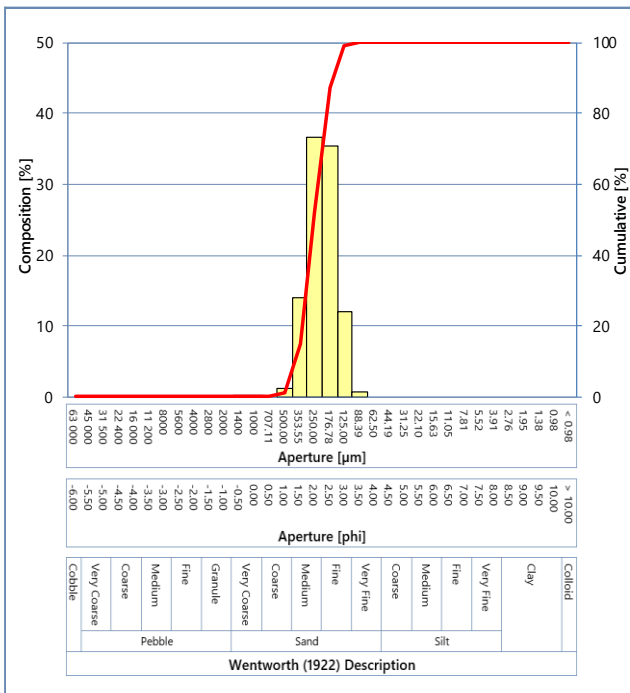


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.00	0.00
1400	-0.50	0.03	0.03
1000	0.00	0.03	0.06
707.11	0.50	0.00	0.06
500.00	1.00	1.13	1.20
353.55	1.50	13.95	15.15
250.00	2.00	36.71	51.86
176.78	2.50	35.43	87.29
125.00	3.00	12.07	99.36
88.39	3.50	0.64	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	254	Medium sand
Median [phi]*	1.97	
Mean [µm]*†	253	Medium sand
Mean [phi]*†	1.98	
Sorting [µm]†	1.40	Well sorted
Sorting [phi]†	0.49	
Skewness [µm]†	-0.01	Symmetrical
Skewness [phi]†	0.01	
Gravel [%]‡	0.00	Sand
Sand [%]‡	100.00	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-A-ST22

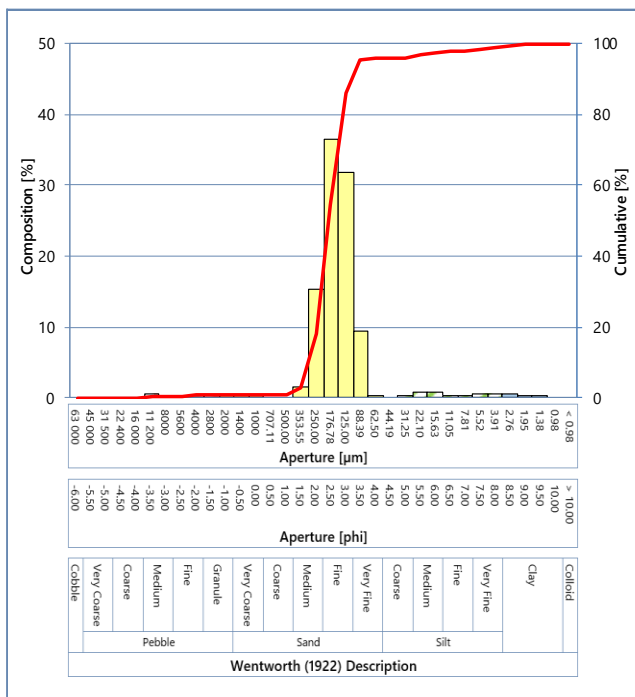


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.43	0.43
8000	-3.00	0.00	0.43
5600	-2.50	0.06	0.49
4000	-2.00	0.16	0.65
2800	-1.50	0.10	0.76
2000	-1.00	0.04	0.80
1400	-0.50	0.04	0.84
1000	0.00	0.09	0.93
707.11	0.50	0.00	0.93
500.00	1.00	0.00	0.93
353.55	1.50	1.63	2.56
250.00	2.00	15.41	17.97
176.78	2.50	36.41	54.38
125.00	3.00	31.78	86.15
88.39	3.50	9.46	95.61
62.50	4.00	0.38	95.99
44.19	4.50	0.00	95.99
31.25	5.00	0.06	96.05
22.10	5.50	0.80	96.84
15.63	6.00	0.75	97.59
11.05	6.50	0.32	97.91
7.81	7.00	0.25	98.16
5.52	7.50	0.44	98.59
3.91	8.00	0.54	99.14
2.76	8.50	0.47	99.61
1.95	9.00	0.31	99.92
1.38	9.50	0.08	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	184	Fine sand
Median [phi]*	2.44	
Mean [µm]*†	183	Fine sand
Mean [phi]*†	2.45	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]†	-0.06	Symmetrical
Skewness [phi]†	0.06	
Gravel [%]†	0.80	
Sand [%]†	95.19	Sand
Fines [%]†	4.01	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-A-ST34

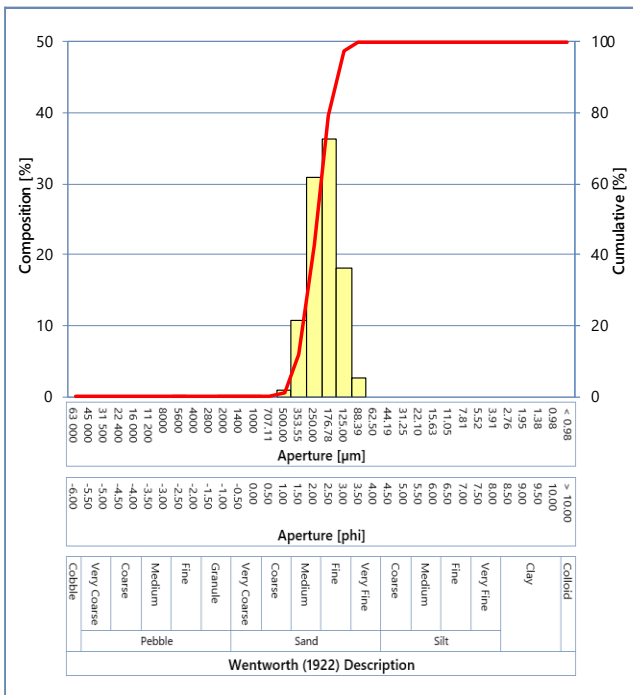


No photograph available

FRACTIONAL DATA

Aperture [μm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.04	0.04
4000	-2.00	0.00	0.04
2800	-1.50	0.00	0.04
2000	-1.00	0.05	0.09
1400	-0.50	0.05	0.14
1000	0.00	0.07	0.21
707.11	0.50	0.00	0.21
500.00	1.00	0.80	1.02
353.55	1.50	10.83	11.85
250.00	2.00	30.96	42.80
176.78	2.50	36.33	79.14
125.00	3.00	18.23	97.36
88.39	3.50	2.64	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [μm]*	213	Fine sand
Mode 2 [μm]*	-	-
Mode 3 [μm]*	-	-
Median [μm]*	233	Fine sand
Median [phi]*	2.10	
Mean [μm]*†	233	Fine sand
Mean [phi]*†	2.10	
Sorting [μm]†	1.45	Moderately well sorted
Sorting [phi]†	0.53	
Skewness [μm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]†	0.09	Sand
Sand [%]†	99.91	
Fines [%]†	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 μm - 1000 μm) and Laser Diffraction (< 1000 μm - < 0.98 μm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-A-ST36

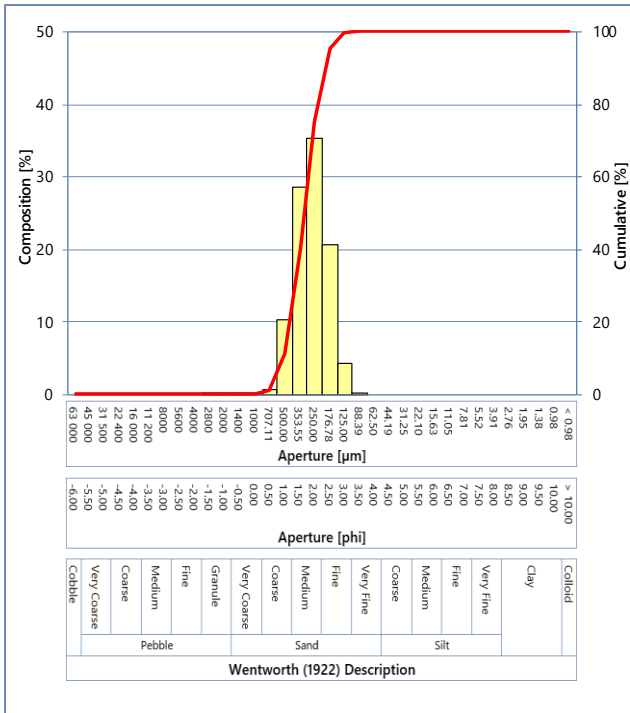


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.03	0.03
2000	-1.00	0.04	0.07
1400	-0.50	0.10	0.17
1000	0.00	0.13	0.30
707.11	0.50	0.76	1.06
500.00	1.00	10.28	11.35
353.55	1.50	28.52	39.87
250.00	2.00	35.23	75.09
176.78	2.50	20.53	95.62
125.00	3.00	4.31	99.94
88.39	3.50	0.06	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

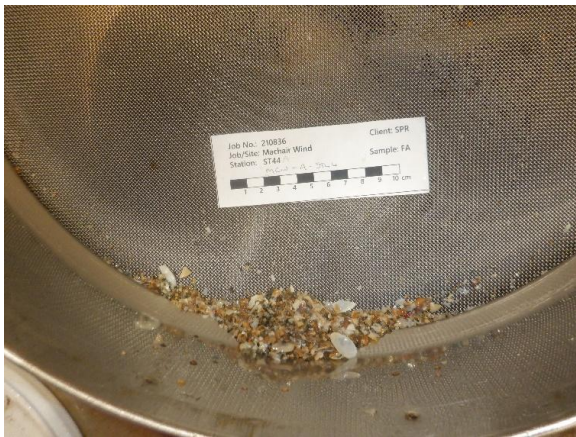


SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	320	Medium sand
Median [phi]*	1.64	
Mean [µm]*†	319	Medium sand
Mean [phi]*†	1.65	
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.56	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

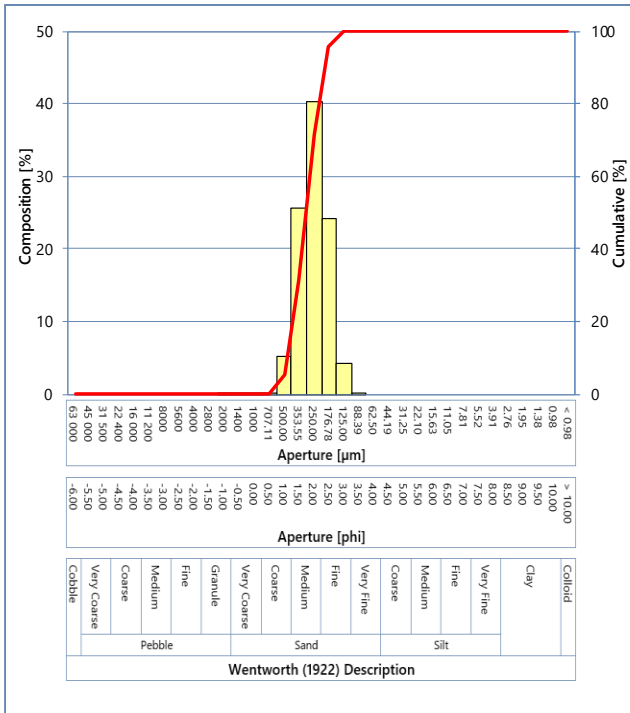
STATION: MCW-A-ST44A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.01	0.01
1400	-0.50	0.05	0.07
1000	0.00	0.08	0.15
707.11	0.50	0.07	0.21
500.00	1.00	5.22	5.43
353.55	1.50	25.65	31.08
250.00	2.00	40.38	71.46
176.78	2.50	24.28	95.74
125.00	3.00	4.23	99.97
88.39	3.50	0.03	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	301	Medium sand
Median [phi]*	1.73	
Mean [µm]*†	301	Medium sand
Mean [phi]*†	1.73	
Sorting [µm]†	1.41	Well sorted
Sorting [phi]†	0.49	
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	
Gravel [%]‡	0.01	Sand
Sand [%]‡	99.99	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-A-ST55

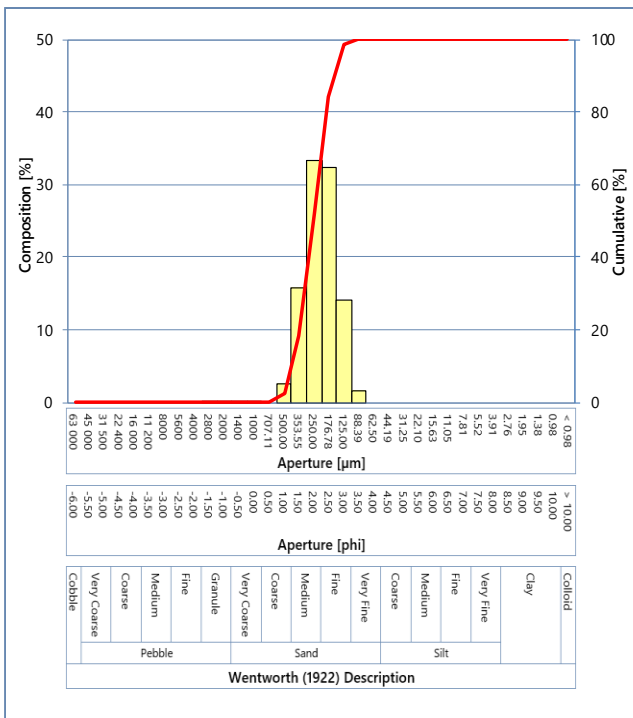


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.03	0.03
2000	-1.00	0.02	0.05
1400	-0.50	0.03	0.09
1000	0.00	0.07	0.16
707.11	0.50	0.00	0.16
500.00	1.00	2.44	2.60
353.55	1.50	15.83	18.43
250.00	2.00	33.33	51.76
176.78	2.50	32.45	84.21
125.00	3.00	14.17	98.38
88.39	3.50	1.62	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	255	Medium sand
Median [phi]*	1.97	
Mean [µm]*†	256	Medium sand
Mean [phi]*†	1.96	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	
Gravel [%]‡	0.05	Sand
Sand [%]‡	99.95	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



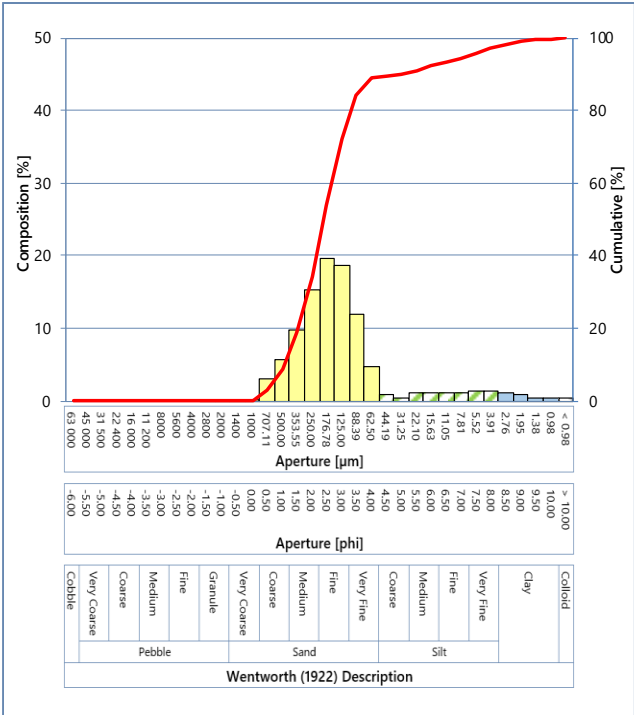
STATION: MCW-B-ST09A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.00	0.00
1400	-0.50	0.02	0.02
1000	0.00	0.04	0.07
707.11	0.50	3.10	3.16
500.00	1.00	5.75	8.91
353.55	1.50	9.81	18.72
250.00	2.00	15.40	34.12
176.78	2.50	19.68	53.80
125.00	3.00	18.54	72.34
88.39	3.50	11.89	84.23
62.50	4.00	4.60	88.83
44.19	4.50	0.84	89.67
31.25	5.00	0.43	90.10
22.10	5.50	0.99	91.09
15.63	6.00	1.17	92.26
11.05	6.50	1.08	93.34
7.81	7.00	1.10	94.44
5.52	7.50	1.24	95.68
3.91	8.00	1.28	96.96
2.76	8.50	1.14	98.10
1.95	9.00	0.82	98.92
1.38	9.50	0.49	99.41
0.98	10.00	0.29	99.70
< 0.98	> 10.00	0.30	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	189	Fine sand
Median [phi]*	2.40	Fine sand
Mean [µm]*†	187	Fine sand
Mean [phi]*†	2.42	Fine sand
Sorting [µm]†	2.88	Poorly sorted
Sorting [phi]†	1.53	Poorly sorted
Skewness [µm]†	-0.24	Fine skewed
Skewness [phi]†	0.24	Fine skewed
Gravel [%]‡	0.00	
Sand [%]‡	88.83	Muddy sand
Fines [%]‡	11.17	Muddy sand

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



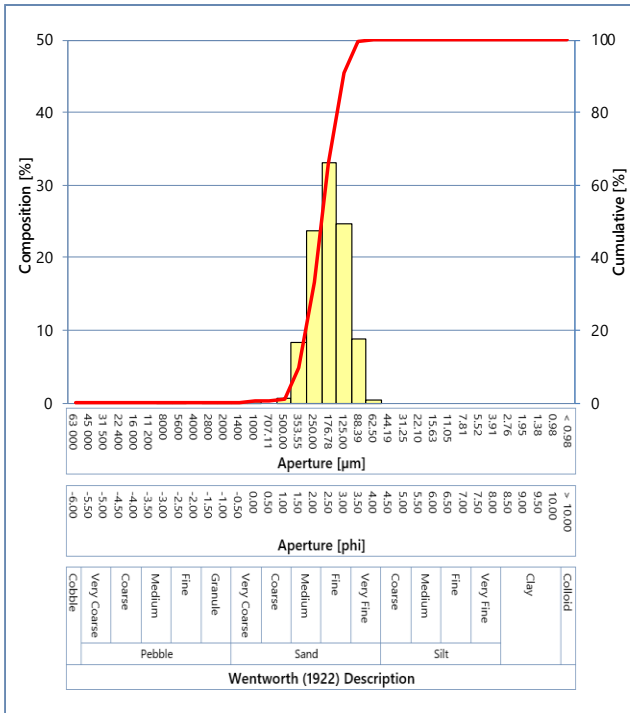
STATION: MCW-B-ST10



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.06	0.06
5600	-2.50	0.05	0.11
4000	-2.00	0.00	0.11
2800	-1.50	0.01	0.11
2000	-1.00	0.03	0.14
1400	-0.50	0.09	0.24
1000	0.00	0.22	0.46
707.11	0.50	0.00	0.46
500.00	1.00	0.74	1.20
353.55	1.50	8.27	9.47
250.00	2.00	23.61	33.08
176.78	2.50	32.98	66.06
125.00	3.00	24.73	90.79
88.39	3.50	8.75	99.53
62.50	4.00	0.47	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

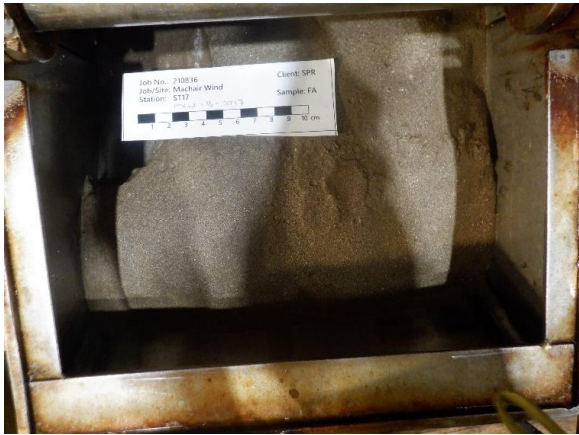


SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	209	Fine sand
Median [phi]*	2.26	Fine sand
Mean [µm]*†	210	Fine sand
Mean [phi]*†	2.25	Fine sand
Sorting [µm]†	1.53	Moderately well sorted
Sorting [phi]†	0.61	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.14	Sand
Sand [%]‡	99.86	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

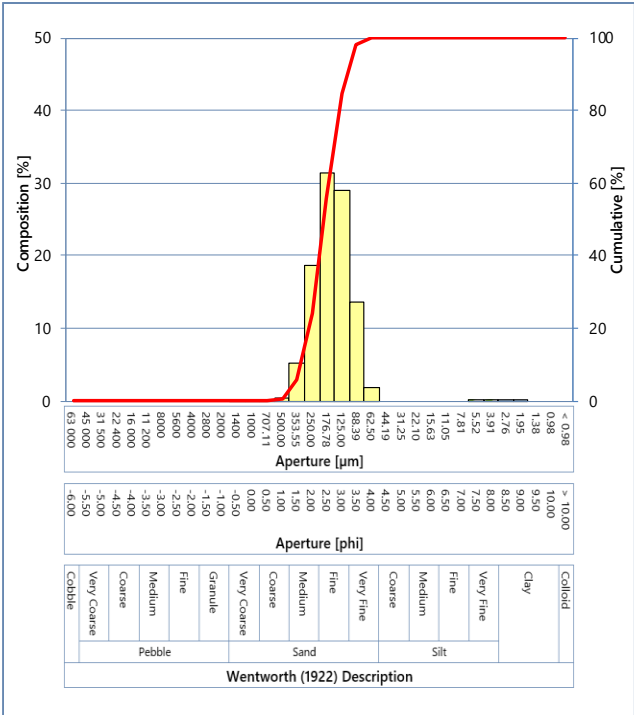
STATION: MCW-B-ST17A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.00	0.00
1400	-0.50	0.02	0.02
1000	0.00	0.06	0.08
707.11	0.50	0.00	0.08
500.00	1.00	0.33	0.41
353.55	1.50	5.27	5.68
250.00	2.00	18.54	24.22
176.78	2.50	31.35	55.57
125.00	3.00	28.97	84.54
88.39	3.50	13.59	98.13
62.50	4.00	1.77	99.90
44.19	4.50	0.00	99.90
31.25	5.00	0.00	99.90
22.10	5.50	0.00	99.90
15.63	6.00	0.00	99.90
11.05	6.50	0.00	99.90
7.81	7.00	0.00	99.90
5.52	7.50	0.02	99.92
3.91	8.00	0.03	99.96
2.76	8.50	0.03	99.99
1.95	9.00	0.01	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	188	Fine sand
Median [phi]*	2.41	Fine sand
Mean [µm]*†	190	Fine sand
Mean [phi]*†	2.39	Fine sand
Sorting [µm]†	1.51	Moderately well sorted
Sorting [phi]†	0.60	Moderately well sorted
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	Symmetrical
Gravel [%]‡	0.00	
Sand [%]‡	99.90	Sand
Fines [%]‡	0.10	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



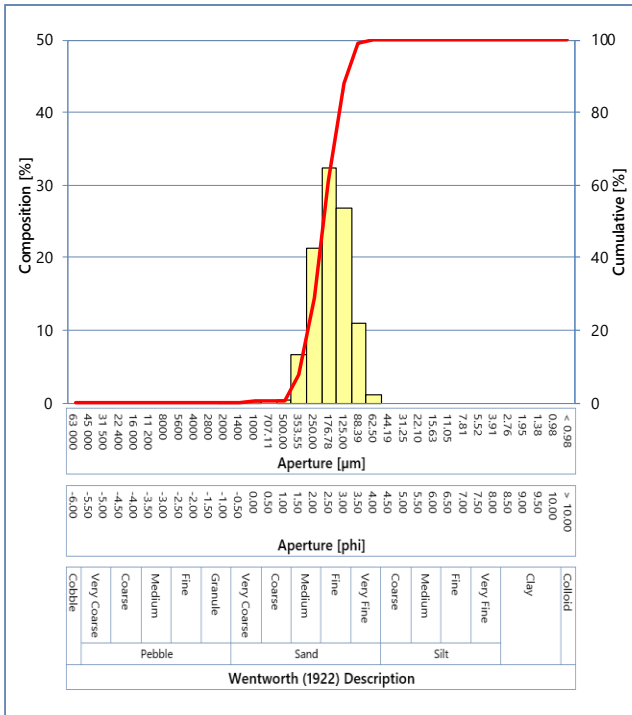
STATION: MCW-B-ST18A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.01	0.01
1400	-0.50	0.09	0.10
1000	0.00	0.23	0.33
707.11	0.50	0.00	0.33
500.00	1.00	0.44	0.77
353.55	1.50	6.73	7.50
250.00	2.00	21.23	28.73
176.78	2.50	32.32	61.05
125.00	3.00	26.87	87.92
88.39	3.50	11.04	98.96
62.50	4.00	1.04	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



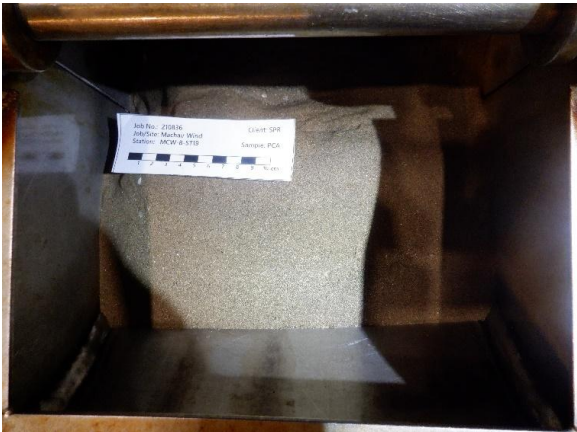
SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	199	Fine sand
Median [phi]*	2.33	Fine sand
Mean [µm]*†	200	Fine sand
Mean [phi]*†	2.32	Fine sand
Sorting [µm]†	1.53	Moderately well sorted
Sorting [phi]†	0.61	Moderately well sorted
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	Symmetrical
Gravel [%]‡	0.01	Sand
Sand [%]‡	99.99	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



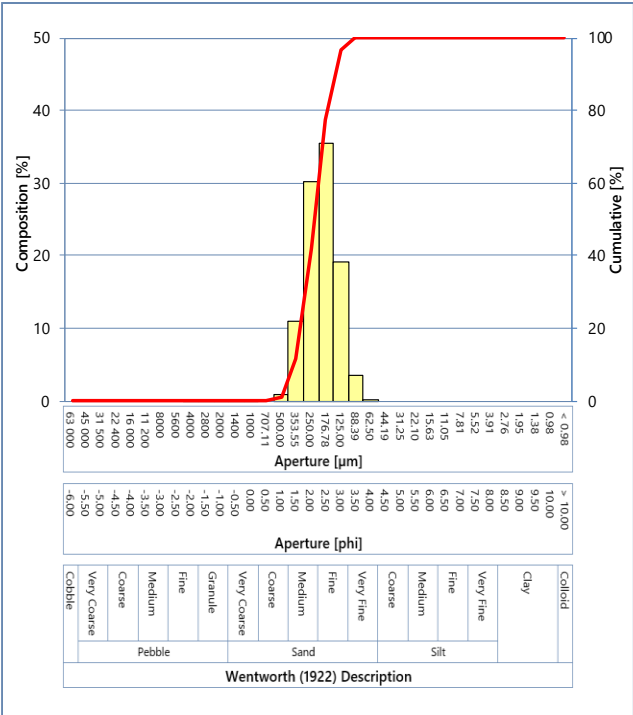
STATION: MCW-B-ST19A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.04	0.04
2800	-1.50	0.02	0.06
2000	-1.00	0.02	0.08
1400	-0.50	0.04	0.12
1000	0.00	0.05	0.17
707.11	0.50	0.00	0.17
500.00	1.00	0.77	0.93
353.55	1.50	10.86	11.79
250.00	2.00	30.15	41.95
176.78	2.50	35.48	77.42
125.00	3.00	19.09	96.51
88.39	3.50	3.45	99.96
62.50	4.00	0.04	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



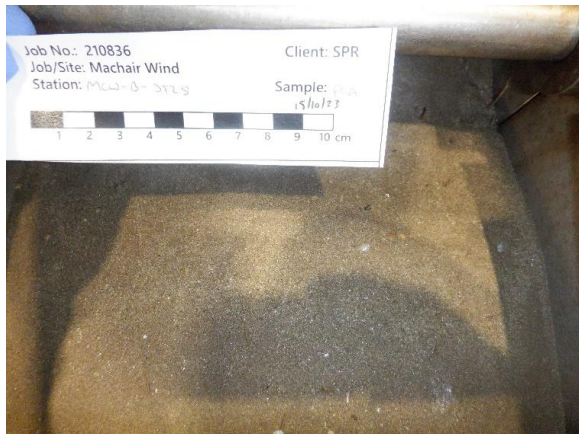
SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	231	Fine sand
Median [phi]*	2.11	
Mean [µm]*†	230	Fine sand
Mean [phi]*†	2.12	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.08	Sand
Sand [%]‡	99.92	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-B-ST28

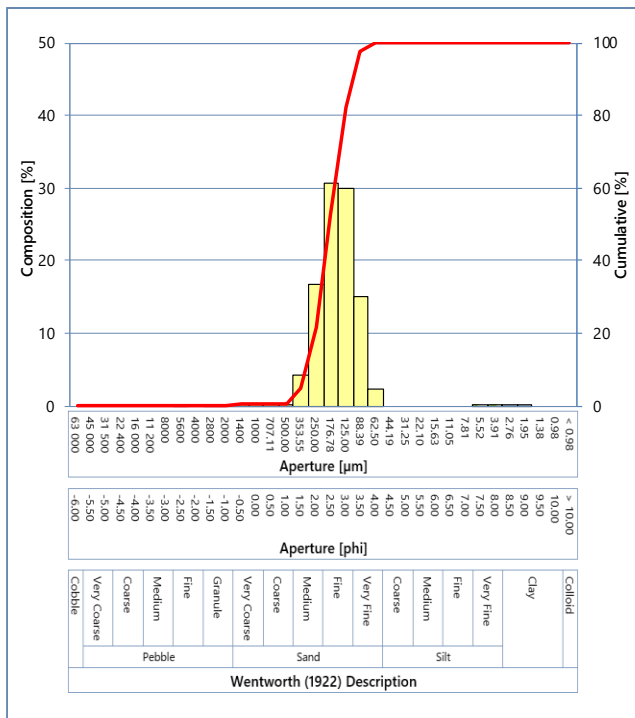


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.22	0.22
4000	-2.00	0.00	0.22
2800	-1.50	0.00	0.22
2000	-1.00	0.03	0.25
1400	-0.50	0.05	0.30
1000	0.00	0.11	0.42
707.11	0.50	0.10	0.52
500.00	1.00	0.21	0.73
353.55	1.50	4.26	4.99
250.00	2.00	16.84	21.83
176.78	2.50	30.63	52.46
125.00	3.00	29.99	82.45
88.39	3.50	15.04	97.49
62.50	4.00	2.31	99.80
44.19	4.50	0.00	99.80
31.25	5.00	0.00	99.80
22.10	5.50	0.00	99.80
15.63	6.00	0.00	99.80
11.05	6.50	0.00	99.80
7.81	7.00	0.00	99.80
5.52	7.50	0.04	99.84
3.91	8.00	0.07	99.91
2.76	8.50	0.06	99.97
1.95	9.00	0.03	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	182	Fine sand
Median [phi]*	2.46	Fine sand
Mean [µm]*†	184	Fine sand
Mean [phi]*†	2.45	Fine sand
Sorting [µm]†	1.51	Moderately well sorted
Sorting [phi]†	0.60	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]†	0.25	Sand
Sand [%]†	99.55	
Fines [%]†	0.20	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



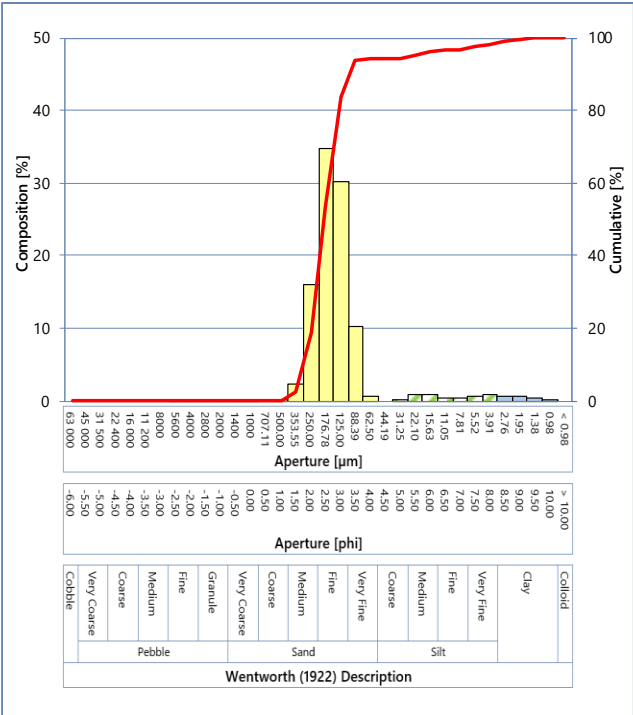
STATION: MCW-B-ST29A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.07	0.07
4000	-2.00	0.05	0.12
2800	-1.50	0.02	0.14
2000	-1.00	0.01	0.15
1400	-0.50	0.02	0.18
1000	0.00	0.06	0.23
707.11	0.50	0.00	0.23
500.00	1.00	0.02	0.25
353.55	1.50	2.26	2.51
250.00	2.00	16.05	18.55
176.78	2.50	34.71	53.27
125.00	3.00	30.19	83.46
88.39	3.50	10.16	93.62
62.50	4.00	0.60	94.21
44.19	4.50	0.00	94.21
31.25	5.00	0.08	94.29
22.10	5.50	0.86	95.15
15.63	6.00	0.83	95.98
11.05	6.50	0.46	96.44
7.81	7.00	0.43	96.87
5.52	7.50	0.66	97.54
3.91	8.00	0.80	98.34
2.76	8.50	0.74	99.08
1.95	9.00	0.52	99.60
1.38	9.50	0.31	99.90
0.98	10.00	0.10	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	183	Fine sand
Median [phi]*	2.45	Fine sand
Mean [µm]*†	181	Fine sand
Mean [phi]*†	2.47	Fine sand
Sorting [µm]†	1.81	Moderately sorted
Sorting [phi]†	0.86	Moderately sorted
Skewness [µm]†	-0.29	Fine skewed
Skewness [phi]†	0.29	Fine skewed
Gravel [%]‡	0.15	
Sand [%]‡	94.06	Sand
Fines [%]‡	5.79	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



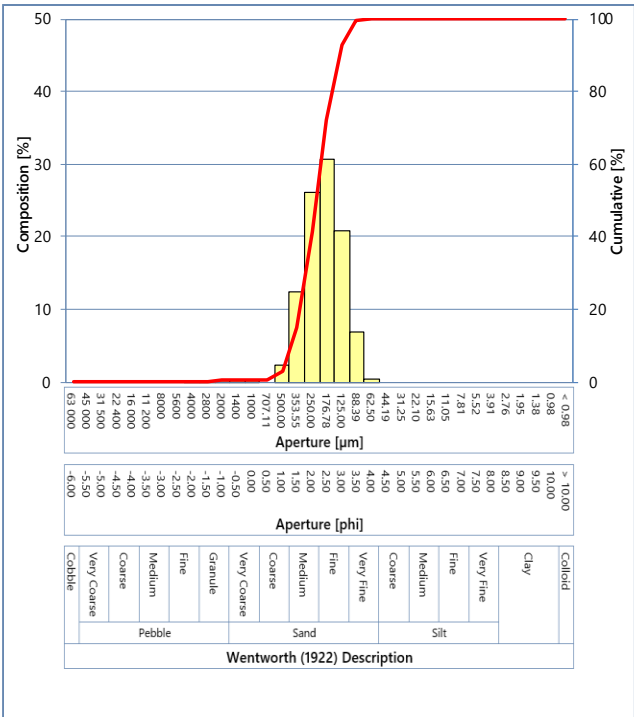
STATION: MCW-B-ST30A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.12	0.12
2800	-1.50	0.10	0.22
2000	-1.00	0.09	0.31
1400	-0.50	0.04	0.35
1000	0.00	0.05	0.40
707.11	0.50	0.00	0.40
500.00	1.00	2.29	2.69
353.55	1.50	12.43	15.12
250.00	2.00	26.14	41.26
176.78	2.50	30.78	72.05
125.00	3.00	20.87	92.91
88.39	3.50	6.82	99.73
62.50	4.00	0.27	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	227	Fine sand
Median [phi]*	2.14	
Mean [µm]*†	226	Fine sand
Mean [phi]*†	2.15	
Sorting [µm]‡	1.55	Moderately well sorted
Sorting [phi]‡	0.63	
Skewness [µm]‡	0.00	Symmetrical
Skewness [phi]‡	0.00	
Gravel [%]‡	0.31	Sand
Sand [%]‡	99.69	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-B-ST38A

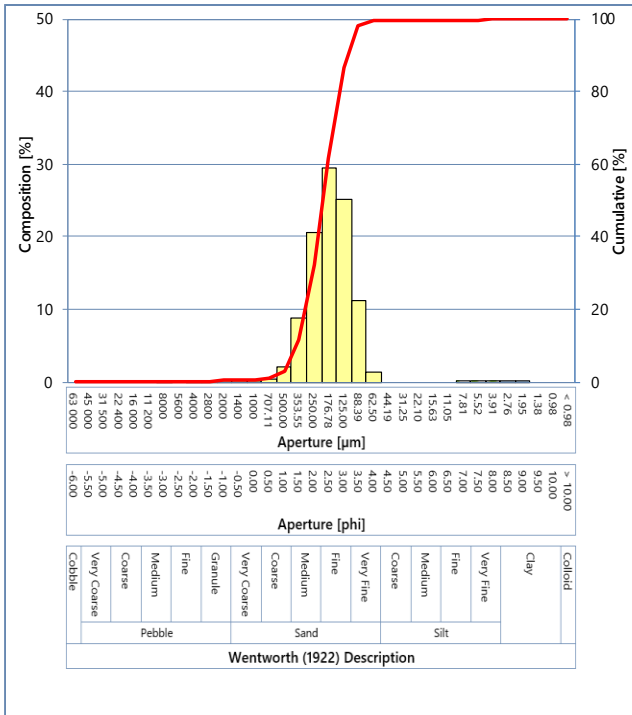


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.13	0.13
5600	-2.50	0.00	0.13
4000	-2.00	0.01	0.14
2800	-1.50	0.05	0.20
2000	-1.00	0.09	0.29
1400	-0.50	0.08	0.37
1000	0.00	0.16	0.53
707.11	0.50	0.29	0.82
500.00	1.00	2.08	2.89
353.55	1.50	8.70	11.59
250.00	2.00	20.67	32.26
176.78	2.50	29.49	61.75
125.00	3.00	25.04	86.79
88.39	3.50	11.28	98.07
62.50	4.00	1.39	99.46
44.19	4.50	0.00	99.46
31.25	5.00	0.00	99.46
22.10	5.50	0.00	99.46
15.63	6.00	0.00	99.46
11.05	6.50	0.00	99.46
7.81	7.00	0.02	99.49
5.52	7.50	0.14	99.63
3.91	8.00	0.17	99.80
2.76	8.50	0.14	99.94
1.95	9.00	0.06	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	203	Fine sand
Median [phi]*	2.30	
Mean [µm]*†	205	Fine sand
Mean [phi]*†	2.28	
Sorting [µm]‡	1.60	Moderately well sorted
Sorting [phi]‡	0.67	
Skewness [µm]‡	0.04	Symmetrical
Skewness [phi]‡	-0.04	
Gravel [%]‡	0.29	
Sand [%]‡	99.17	Sand
Fines [%]‡	0.54	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-B-ST57

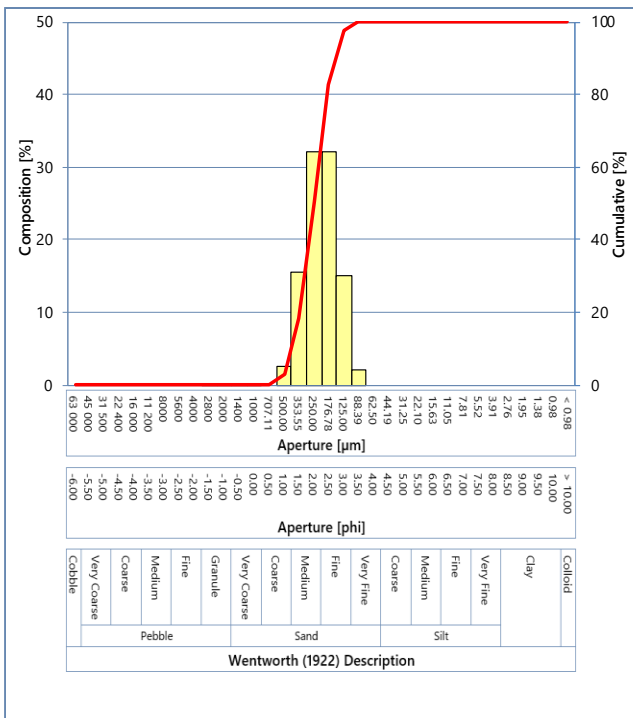


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.11	0.11
2000	-1.00	0.02	0.13
1400	-0.50	0.03	0.16
1000	0.00	0.10	0.26
707.11	0.50	0.00	0.26
500.00	1.00	2.65	2.90
353.55	1.50	15.46	18.36
250.00	2.00	32.15	50.51
176.78	2.50	32.18	82.69
125.00	3.00	15.14	97.83
88.39	3.50	2.17	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	251	Medium sand
Median [phi]*	1.99	Medium sand
Mean [µm]*†	252	Medium sand
Mean [phi]*†	1.99	Medium sand
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.56	Moderately well sorted
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	Symmetrical
Gravel [%]‡	0.13	Sand
Sand [%]‡	99.87	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-B-ST59A

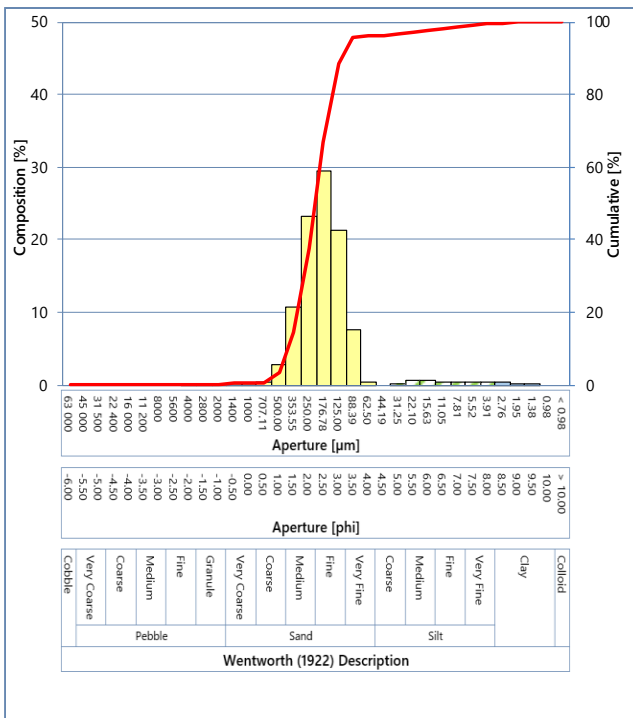


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.10	0.10
2800	-1.50	0.03	0.12
2000	-1.00	0.07	0.19
1400	-0.50	0.12	0.31
1000	0.00	0.15	0.46
707.11	0.50	0.27	0.73
500.00	1.00	2.78	3.51
353.55	1.50	10.84	14.35
250.00	2.00	23.25	37.60
176.78	2.50	29.39	67.00
125.00	3.00	21.35	88.35
88.39	3.50	7.54	95.89
62.50	4.00	0.46	96.36
44.19	4.50	0.00	96.36
31.25	5.00	0.17	96.52
22.10	5.50	0.71	97.24
15.63	6.00	0.55	97.79
11.05	6.50	0.30	98.09
7.81	7.00	0.33	98.42
5.52	7.50	0.47	98.90
3.91	8.00	0.49	99.39
2.76	8.50	0.38	99.77
1.95	9.00	0.22	99.99
1.38	9.50	0.01	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	216	Fine sand
Median [phi]*	2.21	
Mean [µm]*†	215	Fine sand
Mean [phi]*†	2.21	Moderately sorted
Sorting [µm]†	1.62	
Sorting [phi]†	0.70	
Skewness [µm]†	-0.02	Symmetrical
Skewness [phi]†	0.02	
Gravel [%]‡	0.19	Sand
Sand [%]‡	96.17	
Fines [%]‡	3.64	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



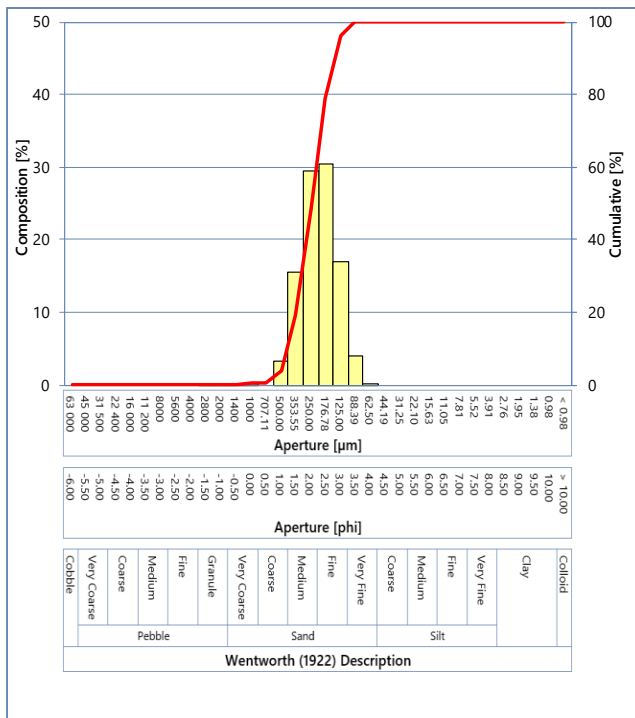
STATION: MCW-C-ST20



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.07	0.11
1400	-0.50	0.13	0.24
1000	0.00	0.12	0.36
707.11	0.50	0.00	0.36
500.00	1.00	3.30	3.66
353.55	1.50	15.51	19.17
250.00	2.00	29.50	48.67
176.78	2.50	30.39	79.06
125.00	3.00	17.01	96.07
88.39	3.50	3.90	99.97
62.50	4.00	0.03	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



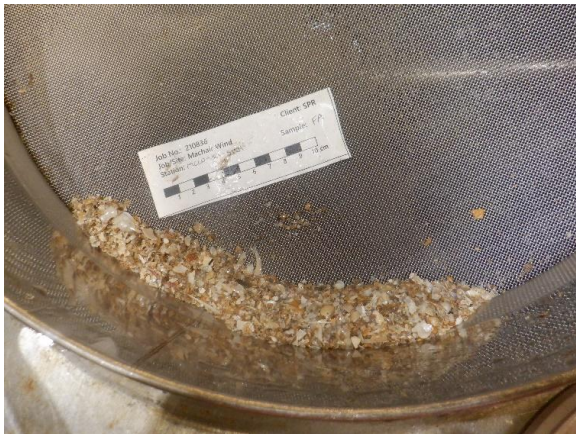
SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	246	Fine sand
Median [phi]*	2.02	Fine sand
Mean [µm]*†	246	Fine sand
Mean [phi]*†	2.02	Fine sand
Sorting [µm]†	1.52	Moderately well sorted
Sorting [phi]†	0.60	Moderately well sorted
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	Symmetrical
Gravel [%]‡	0.11	Sand
Sand [%]‡	99.89	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



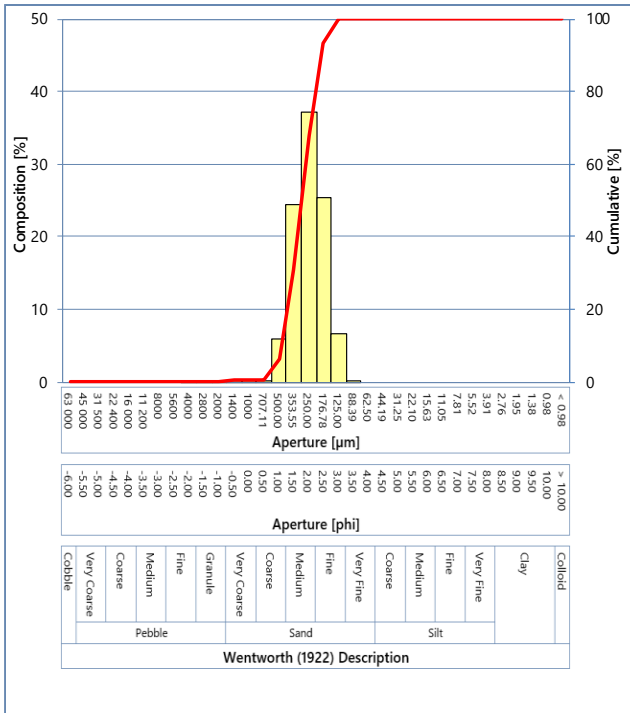
STATION: MCW-C-ST31



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.05	0.05
2800	-1.50	0.04	0.08
2000	-1.00	0.11	0.19
1400	-0.50	0.11	0.30
1000	0.00	0.11	0.41
707.11	0.50	0.09	0.50
500.00	1.00	5.84	6.34
353.55	1.50	24.37	30.72
250.00	2.00	37.24	67.96
176.78	2.50	25.36	93.33
125.00	3.00	6.53	99.85
88.39	3.50	0.15	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

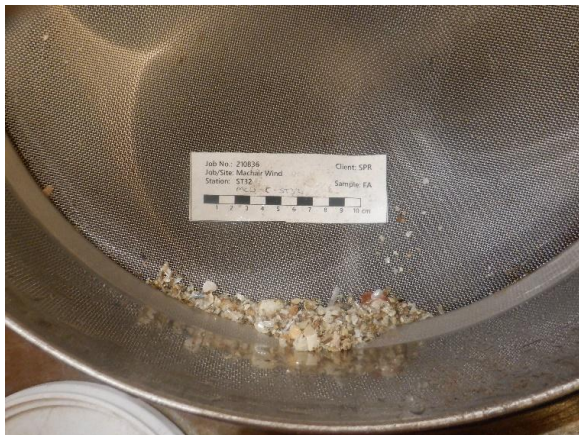
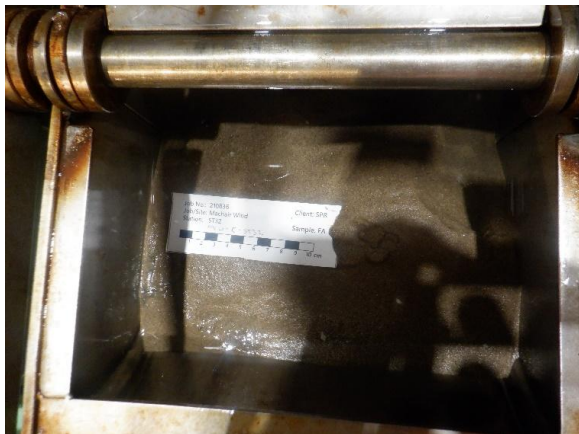


SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	295	Medium sand
Median [phi]*	1.76	
Mean [µm]*†	296	Medium sand
Mean [phi]*†	1.76	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]‡	0.00	Symmetrical
Skewness [phi]‡	0.00	
Gravel [%]†	0.19	Sand
Sand [%]†	99.81	
Fines [%]†	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

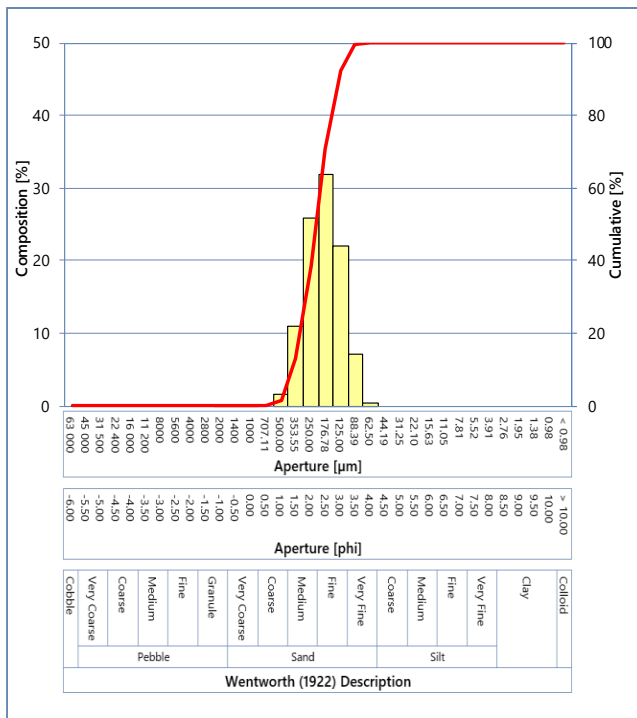
STATION: MCW-C-ST32



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.04	0.04
1400	-0.50	0.02	0.06
1000	0.00	0.04	0.10
707.11	0.50	0.00	0.10
500.00	1.00	1.62	1.72
353.55	1.50	11.07	12.80
250.00	2.00	25.80	38.60
176.78	2.50	31.94	70.54
125.00	3.00	22.03	92.57
88.39	3.50	7.16	99.73
62.50	4.00	0.27	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	221	Fine sand
Median [phi]*	2.18	
Mean [µm]*†	220	Fine sand
Mean [phi]*†	2.18	
Sorting [µm]†	1.53	Moderately well sorted
Sorting [phi]†	0.62	
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	
Gravel [%]‡	0.04	Sand
Sand [%]‡	99.96	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



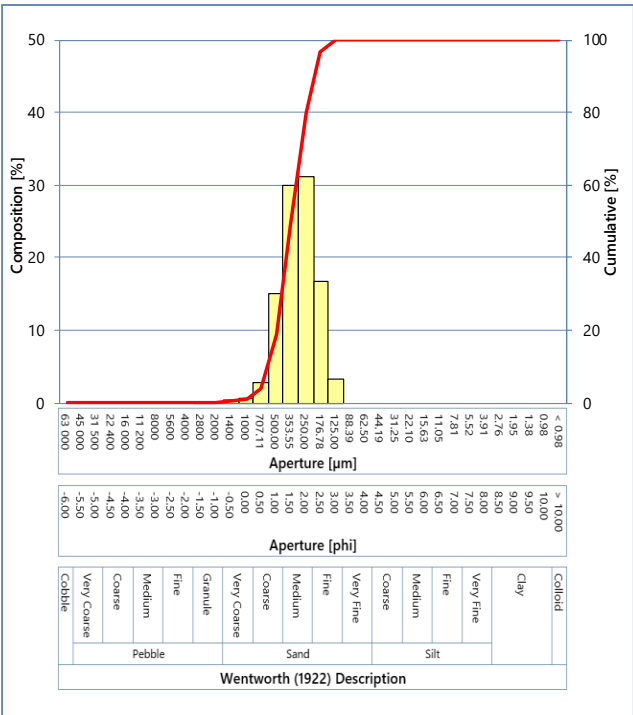
STATION: MCW-C-ST41



FRACTIONAL DATA

Aperture [μm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.05	0.05
2000	-1.00	0.13	0.17
1400	-0.50	0.33	0.50
1000	0.00	0.69	1.19
707.11	0.50	2.70	3.89
500.00	1.00	15.14	19.02
353.55	1.50	29.99	49.01
250.00	2.00	31.03	80.04
176.78	2.50	16.67	96.71
125.00	3.00	3.29	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [μm]*	302	Medium sand
Mode 2 [μm]*	-	-
Mode 3 [μm]*	-	-
Median [μm]*	350	Medium sand
Median [phi]*	1.52	
Mean [μm]*†	351	Medium sand
Mean [phi]*†	1.51	
Sorting [μm]†	1.51	Moderately well sorted
Sorting [phi]†	0.59	
Skewness [μm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.17	Sand
Sand [%]‡	99.83	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 μm - 1000 μm) and Laser Diffraction (< 1000 μm - < 0.98 μm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



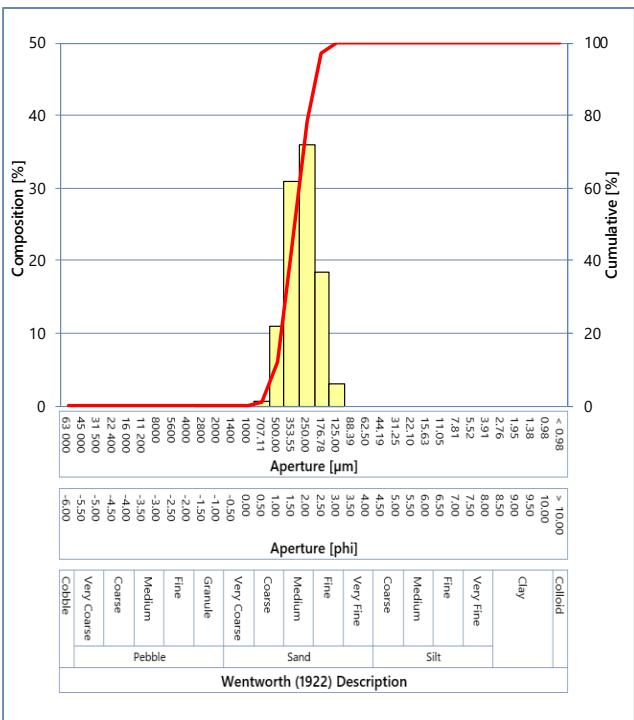
STATION: MCW-C-ST42



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.05	0.05
2000	-1.00	0.02	0.07
1400	-0.50	0.05	0.11
1000	0.00	0.05	0.17
707.11	0.50	0.69	0.85
500.00	1.00	11.07	11.92
353.55	1.50	30.80	42.73
250.00	2.00	35.86	78.58
176.78	2.50	18.50	97.08
125.00	3.00	2.92	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	330	Medium sand
Median [phi]*	1.60	
Mean [µm]*†	329	Medium sand
Mean [phi]*†	1.60	
Sorting [µm]†	1.45	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



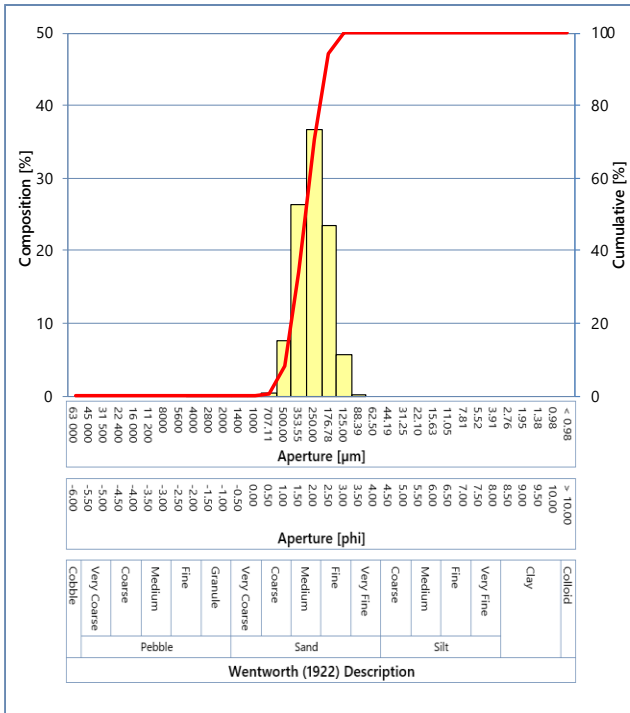
STATION: MCW-C-ST43



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.02	0.02
2800	-1.50	0.01	0.03
2000	-1.00	0.04	0.07
1400	-0.50	0.05	0.12
1000	0.00	0.07	0.19
707.11	0.50	0.27	0.46
500.00	1.00	7.57	8.03
353.55	1.50	26.26	34.29
250.00	2.00	36.65	70.94
176.78	2.50	23.35	94.29
125.00	3.00	5.60	99.89
88.39	3.50	0.11	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	305	Medium sand
Median [phi]*	1.71	
Mean [µm]*†	305	Medium sand
Mean [phi]*†	1.72	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.55	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-C-ST51

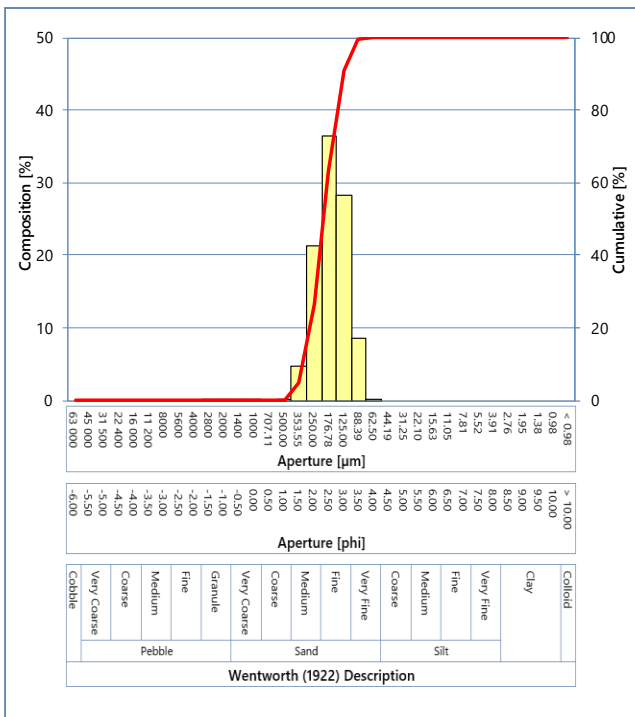


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.02	0.06
1400	-0.50	0.04	0.10
1000	0.00	0.06	0.16
707.11	0.50	0.00	0.16
500.00	1.00	0.07	0.23
353.55	1.50	4.80	5.03
250.00	2.00	21.39	26.43
176.78	2.50	36.41	62.84
125.00	3.00	28.26	91.09
88.39	3.50	8.65	99.74
62.50	4.00	0.26	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	200	Fine sand
Median [phi]*	2.32	
Mean [µm]*†	201	Fine sand
Mean [phi]*†	2.32	
Sorting [µm]†	1.46	Moderately well sorted
Sorting [phi]†	0.54	
Skewness [µm]†	-0.01	Symmetrical
Skewness [phi]†	0.01	
Gravel [%]‡	0.06	Sand
Sand [%]‡	99.94	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



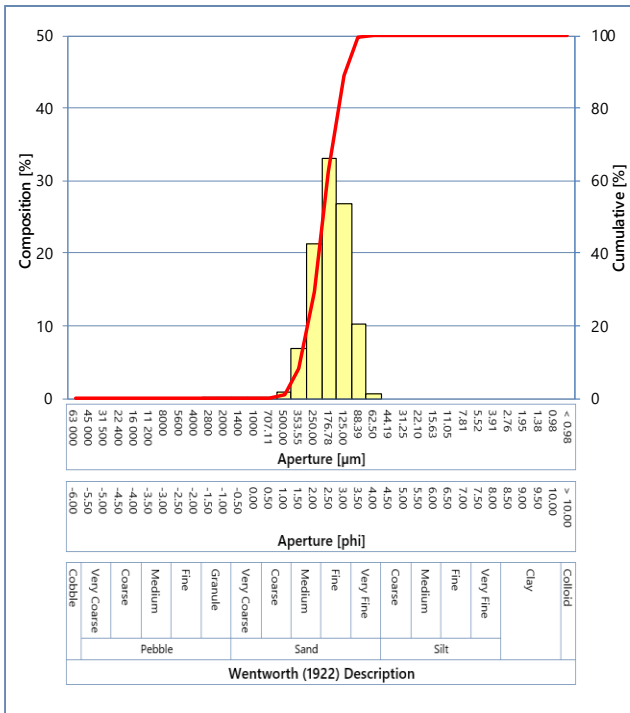
STATION: MCW-C-ST52



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.04	0.07
1400	-0.50	0.07	0.14
1000	0.00	0.06	0.20
707.11	0.50	0.02	0.21
500.00	1.00	0.82	1.03
353.55	1.50	6.95	7.98
250.00	2.00	21.38	29.36
176.78	2.50	32.97	62.33
125.00	3.00	26.86	89.19
88.39	3.50	10.14	99.33
62.50	4.00	0.67	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	201	Fine sand
Median [phi]*	2.31	
Mean [µm]*†	203	Fine sand
Mean [phi]*†	2.30	
Sorting [µm]†	1.52	Moderately well sorted
Sorting [phi]†	0.61	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

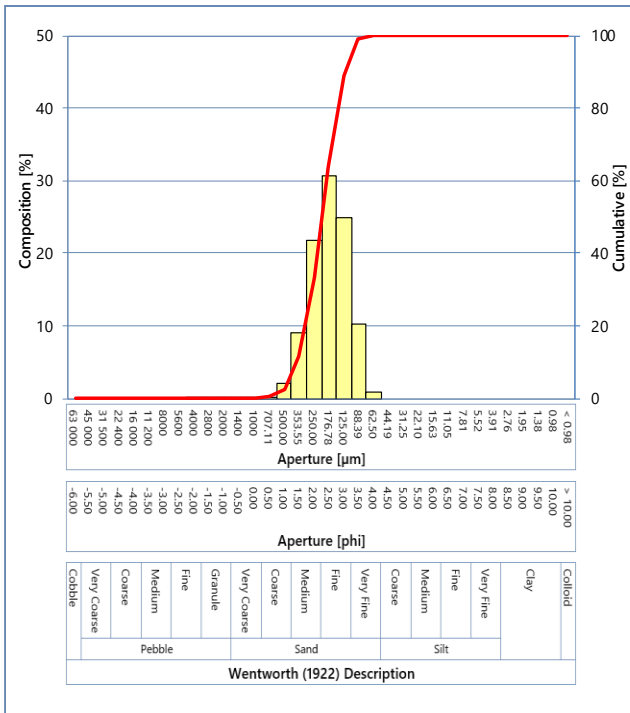
STATION: MCW-C-ST53



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.02	0.02
2800	-1.50	0.03	0.04
2000	-1.00	0.02	0.07
1400	-0.50	0.05	0.12
1000	0.00	0.07	0.19
707.11	0.50	0.13	0.32
500.00	1.00	1.98	2.30
353.55	1.50	9.12	11.42
250.00	2.00	21.88	33.30
176.78	2.50	30.72	64.03
125.00	3.00	24.93	88.95
88.39	3.50	10.12	99.08
62.50	4.00	0.92	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	207	Fine sand
Median [phi]*	2.27	
Mean [µm]*†	209	Fine sand
Mean [phi]*†	2.26	
Sorting [µm]‡	1.57	Moderately well sorted
Sorting [phi]‡	0.65	
Skewness [µm]‡	0.04	Symmetrical
Skewness [phi]‡	-0.04	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

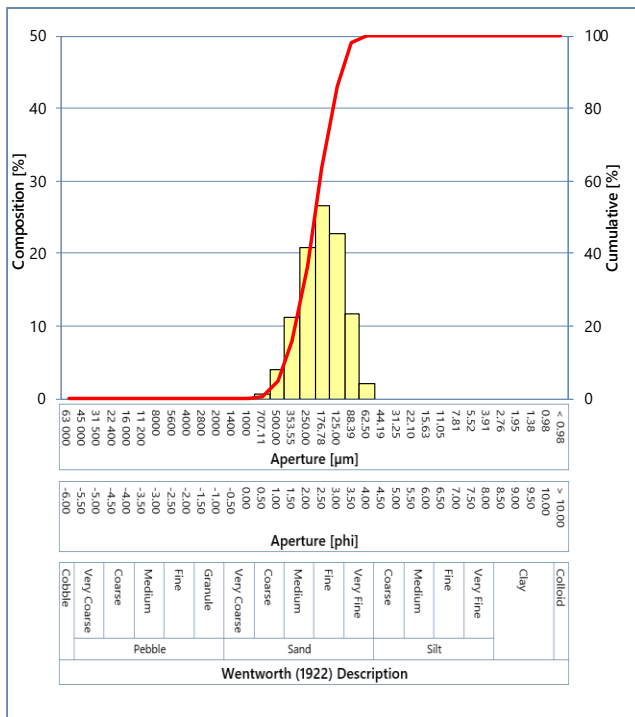
STATION: MCW-C-ST54



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.02	0.06
1400	-0.50	0.04	0.11
1000	0.00	0.06	0.17
707.11	0.50	0.57	0.74
500.00	1.00	3.90	4.64
353.55	1.50	11.19	15.83
250.00	2.00	20.87	36.70
176.78	2.50	26.67	63.37
125.00	3.00	22.80	86.17
88.39	3.50	11.71	97.88
62.50	4.00	2.12	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	210	Fine sand
Median [phi]*	2.25	
Mean [µm]*†	212	Fine sand
Mean [phi]*†	2.24	
Sorting [µm]†	1.65	Moderately sorted
Sorting [phi]†	0.72	
Skewness [µm]†	0.04	Symmetrical
Skewness [phi]†	-0.04	
Gravel [%]‡	0.06	
Sand [%]‡	99.94	Sand
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

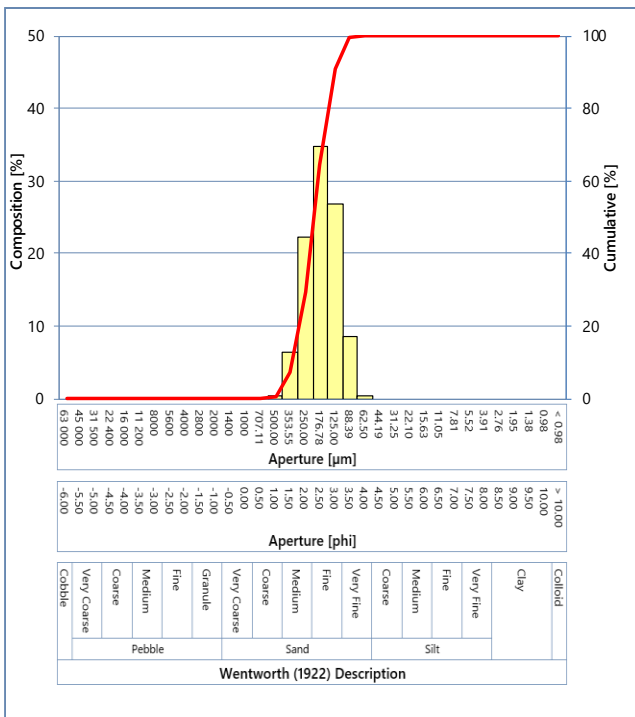
STATION: MCW-C-ST62



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.01	0.01
2800	-1.50	0.00	0.01
2000	-1.00	0.04	0.05
1400	-0.50	0.04	0.10
1000	0.00	0.05	0.15
707.11	0.50	0.00	0.15
500.00	1.00	0.49	0.63
353.55	1.50	6.50	7.14
250.00	2.00	22.25	29.39
176.78	2.50	34.84	64.23
125.00	3.00	26.79	91.02
88.39	3.50	8.67	99.69
62.50	4.00	0.31	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	204	Fine sand
Median [phi]*	2.30	
Mean [µm]*†	205	Fine sand
Mean [phi]*†	2.29	
Sorting [µm]‡	1.49	Moderately well sorted
Sorting [phi]‡	0.58	
Skewness [µm]‡	0.02	Symmetrical
Skewness [phi]‡	-0.02	
Gravel [%]‡	0.05	Sand
Sand [%]‡	99.95	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

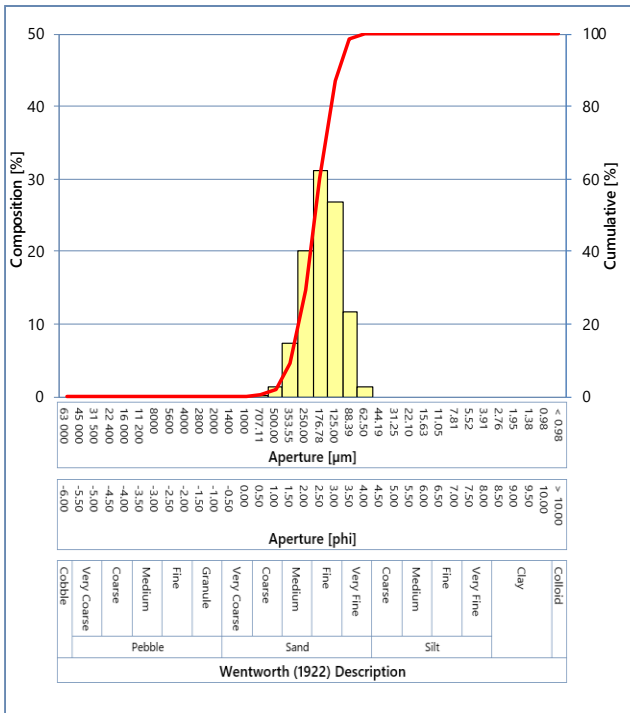
STATION: MCW-C-ST63



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.02	0.06
1400	-0.50	0.05	0.11
1000	0.00	0.06	0.17
707.11	0.50	0.25	0.42
500.00	1.00	1.39	1.81
353.55	1.50	7.29	9.10
250.00	2.00	20.18	29.28
176.78	2.50	31.04	60.33
125.00	3.00	26.82	87.14
88.39	3.50	11.60	98.75
62.50	4.00	1.25	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	198	Fine sand
Median [phi]*	2.33	
Mean [µm]*†	201	Fine sand
Mean [phi]*†	2.32	
Sorting [µm]†	1.56	Moderately well sorted
Sorting [phi]†	0.64	
Skewness [µm]‡	0.05	Symmetrical
Skewness [phi]‡	-0.05	
Gravel [%]†	0.06	
Sand [%]†	99.94	Sand
Fines [%]†	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

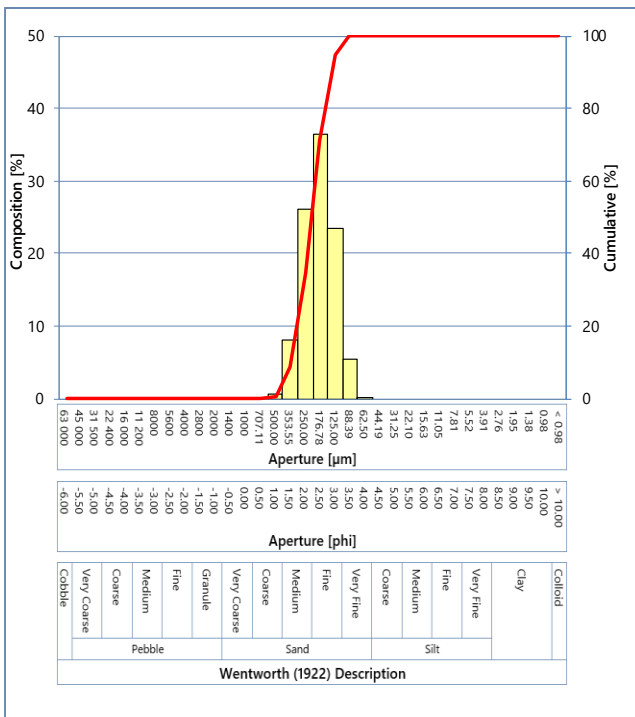
STATION: MCW-C-ST70



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.03	0.03
2800	-1.50	0.01	0.04
2000	-1.00	0.01	0.05
1400	-0.50	0.02	0.07
1000	0.00	0.02	0.09
707.11	0.50	0.00	0.09
500.00	1.00	0.52	0.61
353.55	1.50	7.98	8.59
250.00	2.00	26.03	34.62
176.78	2.50	36.46	71.08
125.00	3.00	23.47	94.55
88.39	3.50	5.40	99.95
62.50	4.00	0.05	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	216	Fine sand
Median [phi]*	2.21	
Mean [µm]*†	216	Fine sand
Mean [phi]*†	2.21	
Sorting [µm]‡	1.46	Moderately well sorted
Sorting [phi]‡	0.55	
Skewness [µm]‡	0.03	Symmetrical
Skewness [phi]‡	-0.03	
Gravel [%]‡	0.05	Sand
Sand [%]‡	99.95	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



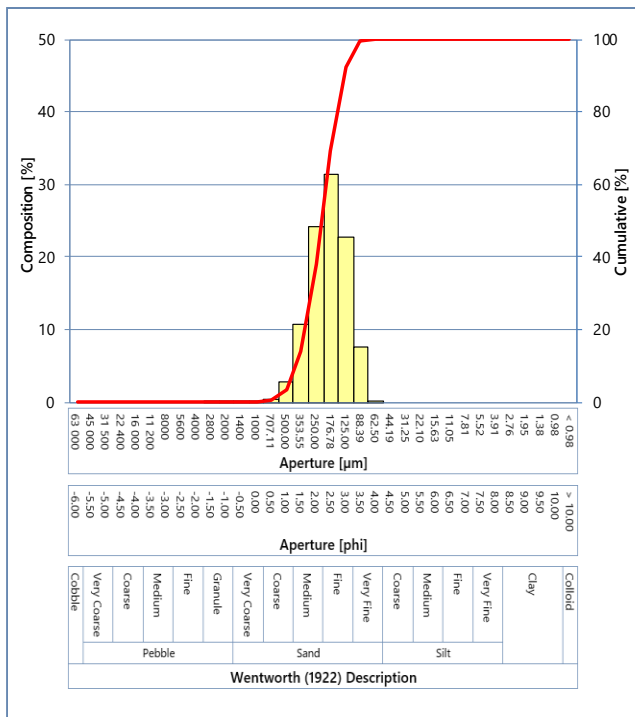
STATION: MCW-C-ST71



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.02	0.02
2000	-1.00	0.05	0.07
1400	-0.50	0.05	0.12
1000	0.00	0.04	0.16
707.11	0.50	0.33	0.49
500.00	1.00	2.69	3.18
353.55	1.50	10.80	13.98
250.00	2.00	24.14	38.13
176.78	2.50	31.31	69.44
125.00	3.00	22.73	92.17
88.39	3.50	7.60	99.77
62.50	4.00	0.23	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

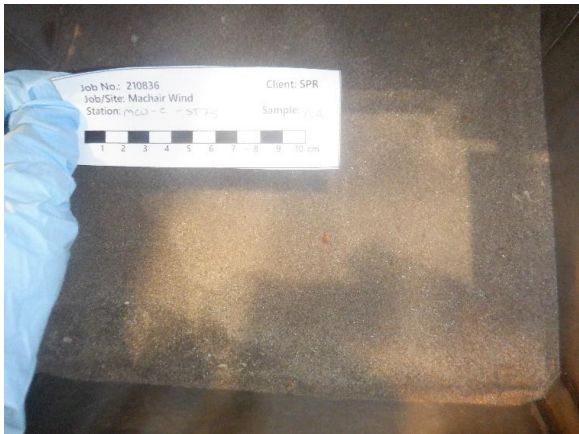


SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	219	Fine sand
Median [phi]*	2.19	
Mean [µm]*†	220	Fine sand
Mean [phi]*†	2.18	
Sorting [µm]†	1.56	Moderately well sorted
Sorting [phi]†	0.64	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.07	Sand
Sand [%]‡	99.93	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-C-ST75

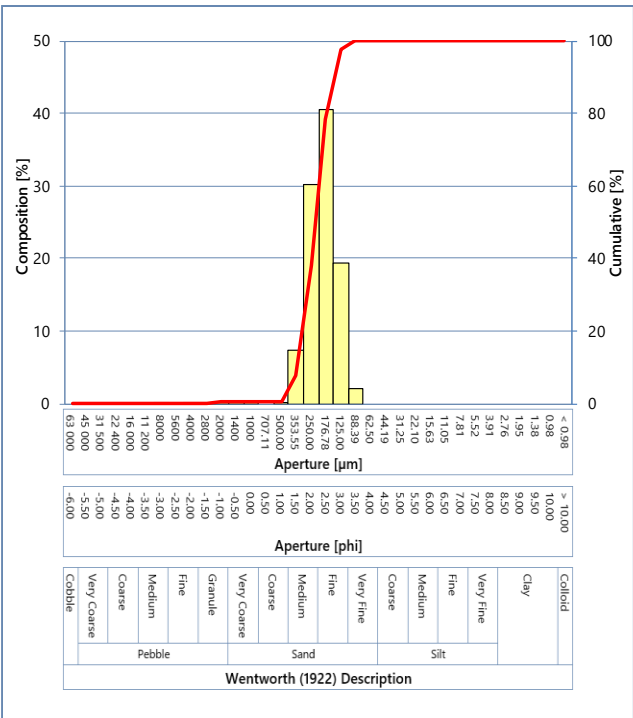


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.07	0.07
5600	-2.50	0.00	0.07
4000	-2.00	0.04	0.12
2800	-1.50	0.02	0.14
2000	-1.00	0.17	0.30
1400	-0.50	0.10	0.40
1000	0.00	0.06	0.47
707.11	0.50	0.00	0.47
500.00	1.00	0.15	0.61
353.55	1.50	7.25	7.87
250.00	2.00	30.13	38.00
176.78	2.50	40.42	78.41
125.00	3.00	19.44	97.86
88.39	3.50	2.14	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	226	Fine sand
Median [phi]*	2.15	
Mean [µm]*†	227	Fine sand
Mean [phi]*†	2.14	
Sorting [µm]†	1.41	Moderately well sorted
Sorting [phi]†	0.50	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.30	Sand
Sand [%]‡	99.70	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-C-ST77

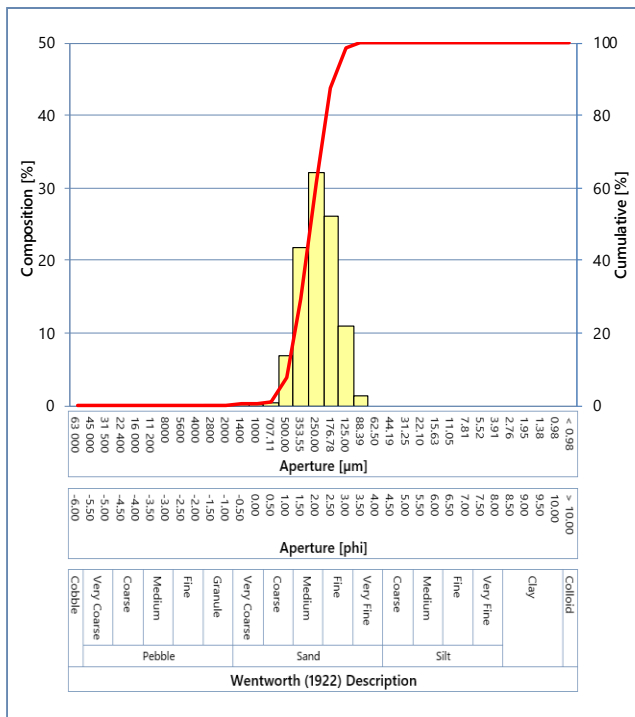


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.11	0.11
2000	-1.00	0.09	0.19
1400	-0.50	0.17	0.36
1000	0.00	0.18	0.53
707.11	0.50	0.28	0.82
500.00	1.00	6.85	7.67
353.55	1.50	21.73	29.40
250.00	2.00	32.17	61.57
176.78	2.50	26.18	87.74
125.00	3.00	10.96	98.70
88.39	3.50	1.30	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



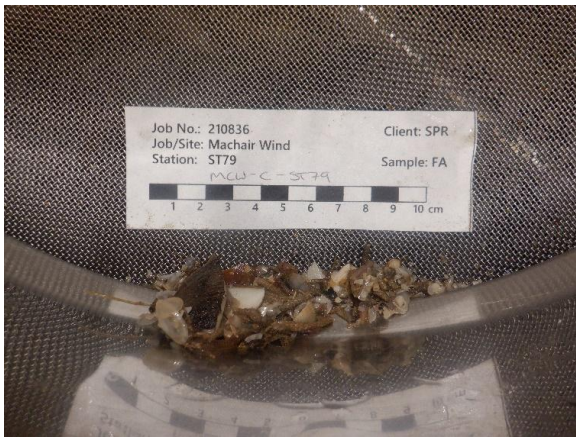
SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	283	Medium sand
Median [phi]*	1.82	
Mean [µm]*†	285	Medium sand
Mean [phi]*†	1.81	
Sorting [µm]‡	1.53	Moderately well sorted
Sorting [phi]‡	0.62	
Skewness [µm]‡	0.01	Symmetrical
Skewness [phi]‡	-0.01	
Gravel [%]‡	0.19	Sand
Sand [%]‡	99.81	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



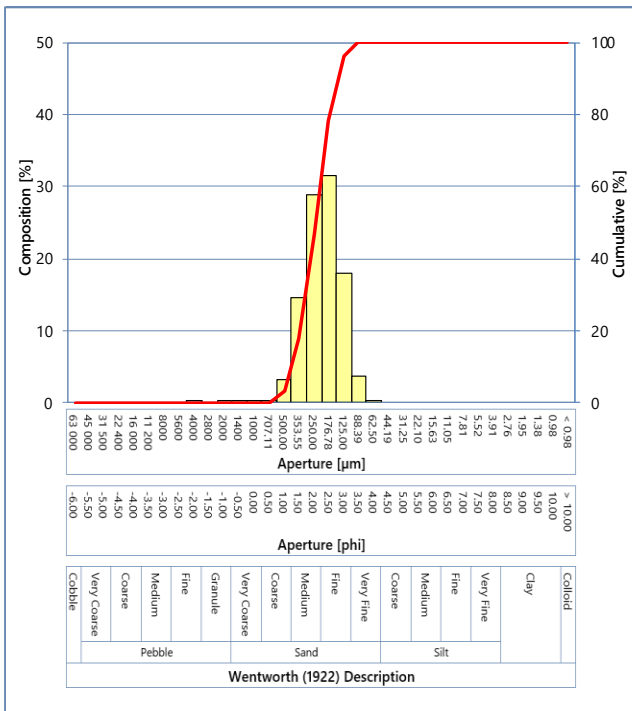
STATION: MCW-C-ST79



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.04	0.04
2800	-1.50	0.00	0.04
2000	-1.00	0.01	0.05
1400	-0.50	0.02	0.07
1000	0.00	0.01	0.08
707.11	0.50	0.11	0.19
500.00	1.00	3.34	3.53
353.55	1.50	14.53	18.05
250.00	2.00	28.93	46.99
176.78	2.50	31.42	78.41
125.00	3.00	17.90	96.31
88.39	3.50	3.67	99.98
62.50	4.00	0.02	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

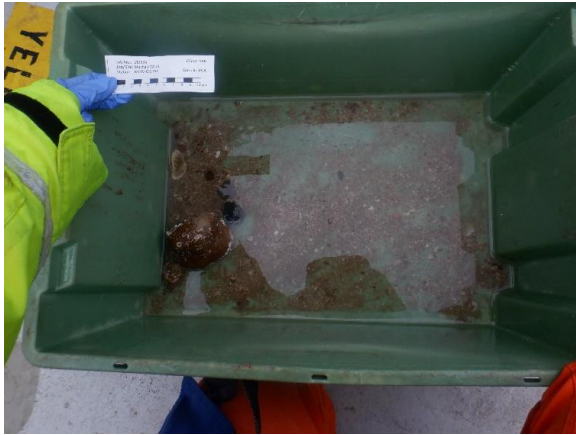


SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	242	Fine sand
Median [phi]*	2.05	
Mean [µm]*†	242	Fine sand
Mean [phi]*†	2.04	
Sorting [µm]†	1.51	Moderately well sorted
Sorting [phi]†	0.60	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.05	Sand
Sand [%]‡	99.95	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-C-ST91

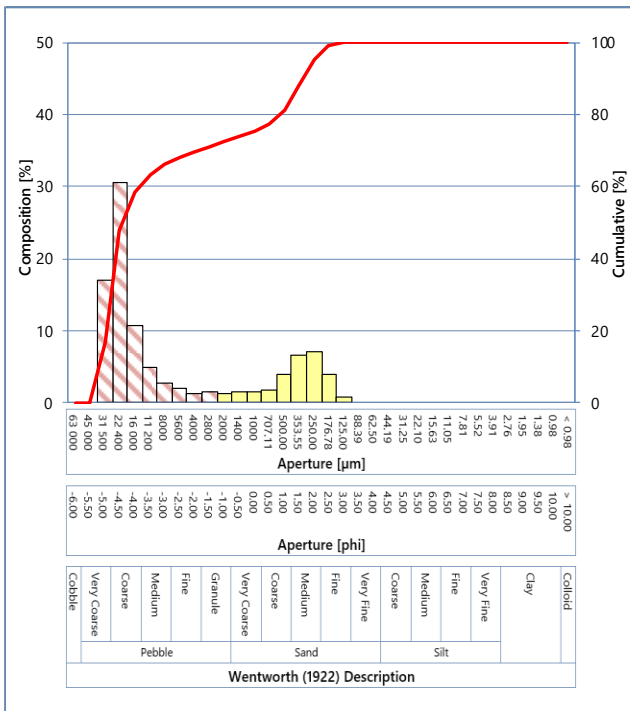


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	17.02	17.02
22 400	-4.50	30.59	47.61
16 000	-4.00	10.80	58.41
11 200	-3.50	5.03	63.44
8000	-3.00	2.68	66.12
5600	-2.50	2.12	68.23
4000	-2.00	1.44	69.67
2800	-1.50	1.56	71.23
2000	-1.00	1.43	72.66
1400	-0.50	1.48	74.14
1000	0.00	1.46	75.60
707.11	0.50	1.72	77.32
500.00	1.00	4.02	81.33
353.55	1.50	6.68	88.01
250.00	2.00	7.02	95.03
176.78	2.50	4.07	99.10
125.00	3.00	0.90	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	26950	Coarse pebble
Mode 2 [µm]*	302	Medium sand
Mode 3 [µm]*	-	-
Median [µm]*	20794	Coarse pebble
Median [phi]*	-4.38	
Mean [µm]*†	6629	Fine pebble
Mean [phi]*†	-2.73	
Sorting [µm]†	6.34	Very poorly sorted
Sorting [phi]†	2.66	
Skewness [µm]†	-0.77	Very fine skewed
Skewness [phi]†	0.77	
Gravel [%]‡	72.66	Sandy gravel
Sand [%]‡	27.34	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

STATION: MCW-C-ST92

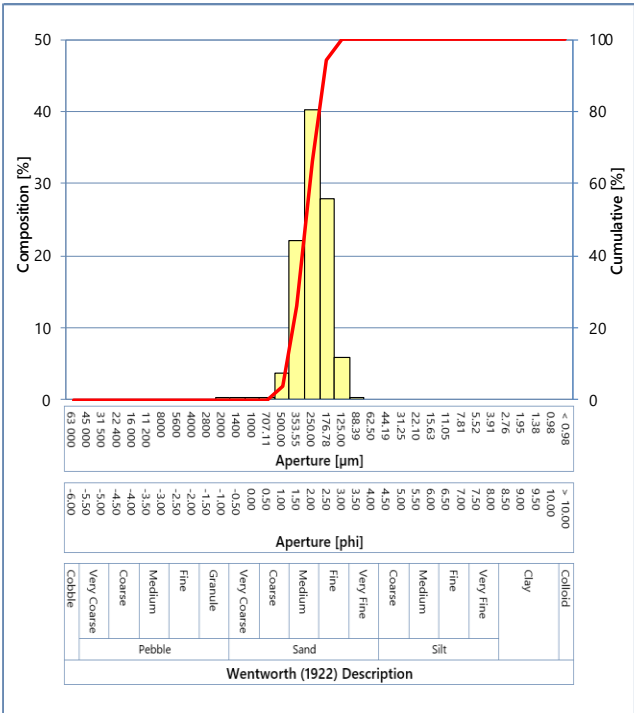


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.01	0.01
1400	-0.50	0.04	0.05
1000	0.00	0.09	0.14
707.11	0.50	0.03	0.17
500.00	1.00	3.75	3.92
353.55	1.50	22.08	26.00
250.00	2.00	40.25	66.25
176.78	2.50	27.80	94.05
125.00	3.00	5.85	99.90
88.39	3.50	0.10	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



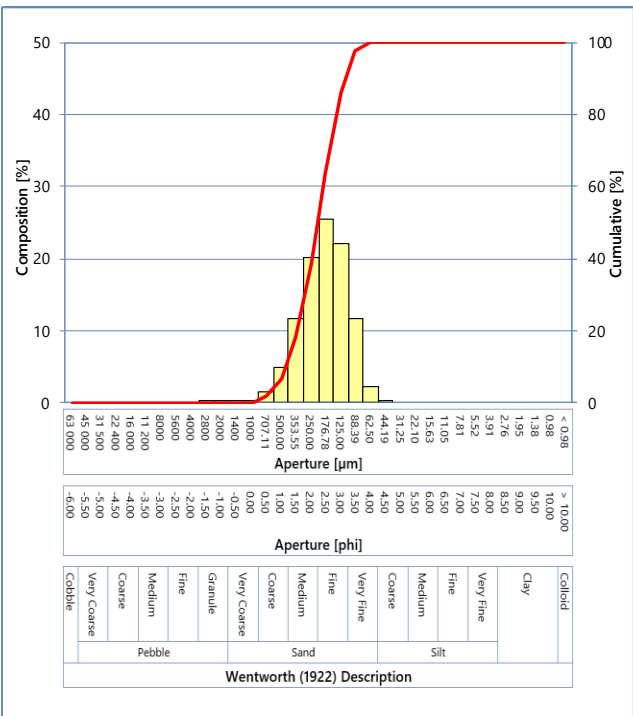
STATION: MCW-D-ST64



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.07	0.07
2000	-1.00	0.01	0.08
1400	-0.50	0.04	0.12
1000	0.00	0.04	0.15
707.11	0.50	1.56	1.72
500.00	1.00	5.04	6.76
353.55	1.50	11.60	18.36
250.00	2.00	20.14	38.50
176.78	2.50	25.45	63.95
125.00	3.00	22.04	85.99
88.39	3.50	11.65	97.65
62.50	4.00	2.35	99.99
44.19	4.50	0.01	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



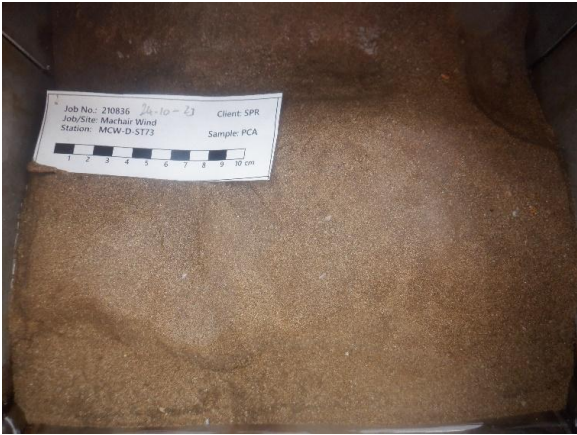
SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	214	Fine sand
Median [phi]*	2.23	Fine sand
Mean [µm]*†	219	Fine sand
Mean [phi]*†	2.19	Fine sand
Sorting [µm]†	1.71	Moderately sorted
Sorting [phi]†	0.78	Moderately sorted
Skewness [µm]†	0.08	Symmetrical
Skewness [phi]†	-0.08	Symmetrical
Gravel [%]‡	0.08	Sand
Sand [%]‡	99.91	
Fines [%]‡	0.01	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



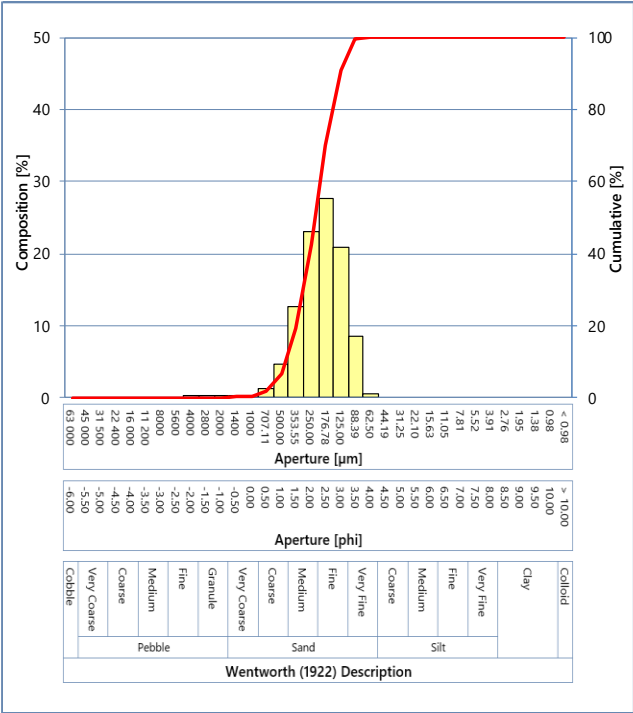
STATION: MCW-D-ST73



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.06	0.06
2800	-1.50	0.01	0.07
2000	-1.00	0.11	0.17
1400	-0.50	0.12	0.30
1000	0.00	0.17	0.46
707.11	0.50	1.33	1.79
500.00	1.00	4.82	6.62
353.55	1.50	12.72	19.34
250.00	2.00	23.04	42.38
176.78	2.50	27.67	70.05
125.00	3.00	20.93	90.99
88.39	3.50	8.48	99.47
62.50	4.00	0.53	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	227	Fine sand
Median [phi]*	2.14	
Mean [µm]*†	231	Fine sand
Mean [phi]*†	2.11	Moderately sorted
Sorting [µm]†	1.66	
Sorting [phi]†	0.73	
Skewness [µm]†	0.07	Symmetrical
Skewness [phi]†	-0.07	
Gravel [%]‡	0.17	Sand
Sand [%]‡	99.83	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



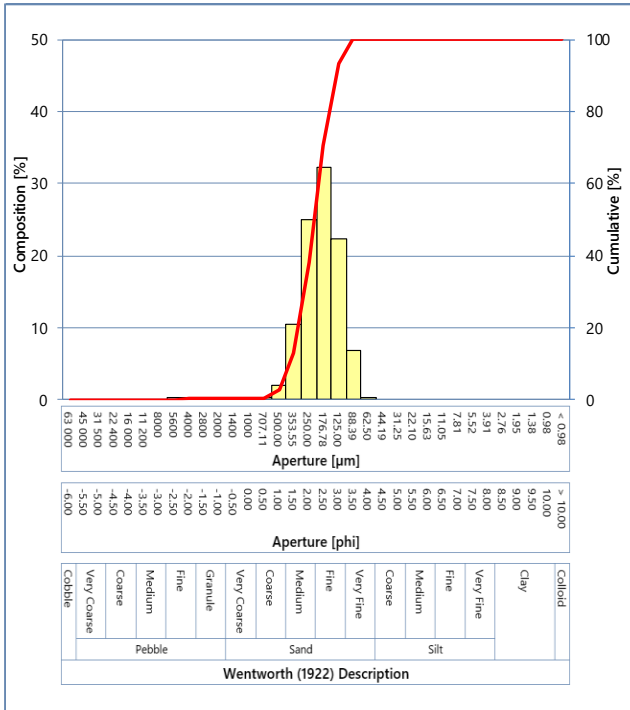
STATION: MCW-D-ST80



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.23	0.23
4000	-2.00	0.08	0.31
2800	-1.50	0.01	0.32
2000	-1.00	0.01	0.33
1400	-0.50	0.02	0.36
1000	0.00	0.03	0.39
707.11	0.50	0.14	0.53
500.00	1.00	2.13	2.66
353.55	1.50	10.61	13.26
250.00	2.00	25.05	38.31
176.78	2.50	32.26	70.57
125.00	3.00	22.46	93.03
88.39	3.50	6.84	99.87
62.50	4.00	0.13	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

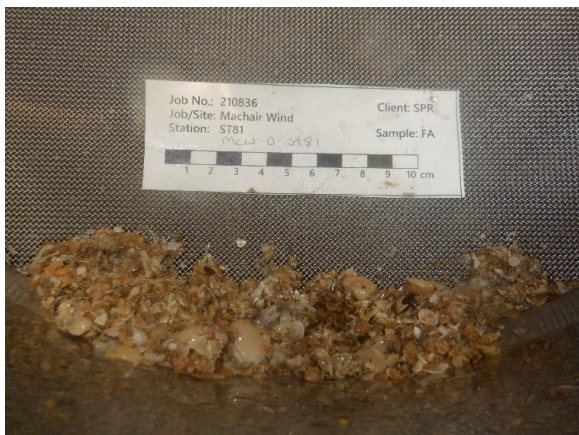
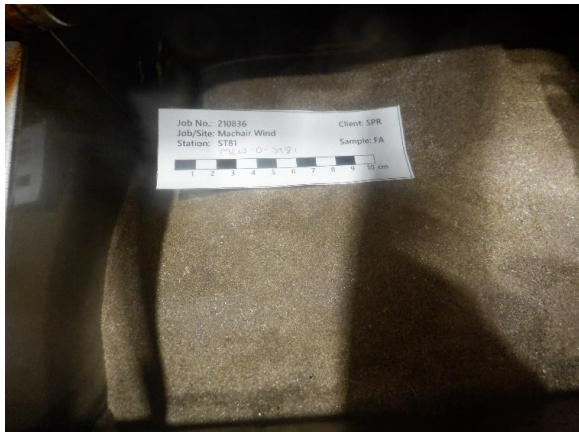


SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	220	Fine sand
Median [phi]*	2.18	
Mean [µm]*†	221	Fine sand
Mean [phi]*†	2.18	
Sorting [µm]†	1.54	Moderately well sorted
Sorting [phi]†	0.62	
Skewness [µm]†	0.03	Symmetrical
Skewness [phi]†	-0.03	
Gravel [%]‡	0.33	Sand
Sand [%]‡	99.67	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

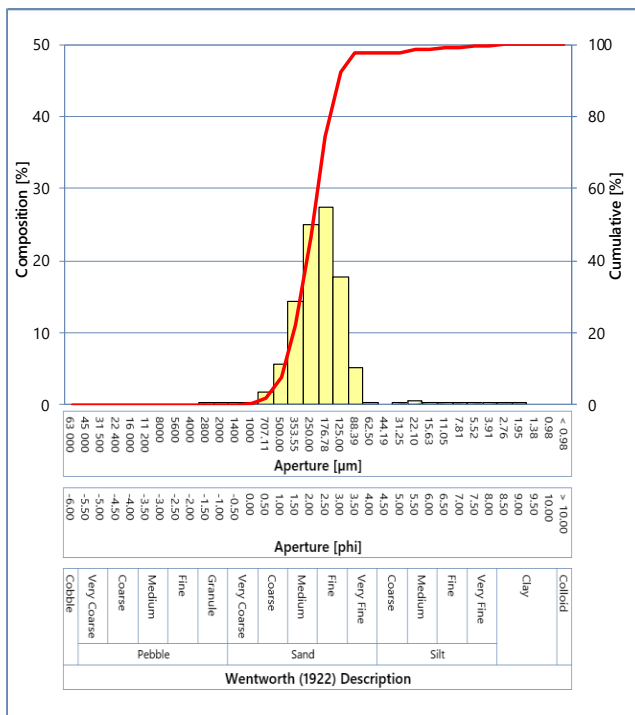
STATION: MCW-D-ST81



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.02	0.02
2000	-1.00	0.07	0.09
1400	-0.50	0.10	0.19
1000	0.00	0.10	0.29
707.11	0.50	1.72	2.01
500.00	1.00	5.67	7.68
353.55	1.50	14.30	21.98
250.00	2.00	24.88	46.86
176.78	2.50	27.53	74.39
125.00	3.00	17.76	92.15
88.39	3.50	5.31	97.46
62.50	4.00	0.14	97.60
44.19	4.50	0.00	97.60
31.25	5.00	0.22	97.82
22.10	5.50	0.59	98.40
15.63	6.00	0.36	98.77
11.05	6.50	0.15	98.92
7.81	7.00	0.20	99.11
5.52	7.50	0.31	99.42
3.91	8.00	0.31	99.74
2.76	8.50	0.23	99.97
1.95	9.00	0.03	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	213	Fine sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	240	Fine sand
Median [phi]*	2.06	
Mean [µm]*†	243	Fine sand
Mean [phi]*†	2.04	Moderately sorted
Sorting [µm]†	1.68	
Sorting [phi]†	0.75	Symmetrical
Skewness [µm]†	0.03	
Skewness [phi]†	-0.03	Sand
Gravel [%]‡	0.09	
Sand [%]‡	97.51	Sand
Fines [%]‡	2.40	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

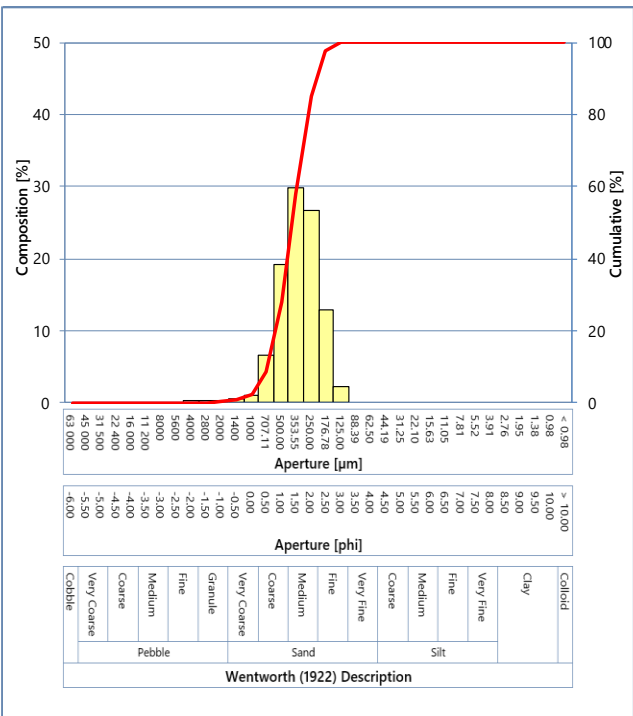
STATION: MCW-D-ST82



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.02	0.02
2800	-1.50	0.14	0.17
2000	-1.00	0.22	0.39
1400	-0.50	0.70	1.09
1000	0.00	1.19	2.28
707.11	0.50	6.65	8.93
500.00	1.00	19.30	28.22
353.55	1.50	29.79	58.01
250.00	2.00	26.80	84.80
176.78	2.50	13.01	97.81
125.00	3.00	2.19	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



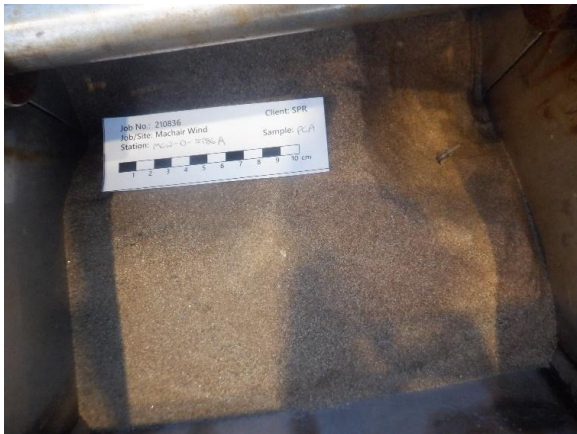
SUMMARY STATISTICS

Mode 1 [µm]*	427	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	388	Medium sand
Median [phi]*	1.37	
Mean [µm]*†	394	Medium sand
Mean [phi]*†	1.34	
Sorting [µm]†	1.58	Moderately well sorted
Sorting [phi]†	0.66	
Skewness [µm]†	0.05	Symmetrical
Skewness [phi]†	-0.05	
Gravel [%]‡	0.39	Sand
Sand [%]‡	99.61	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-D-ST86A

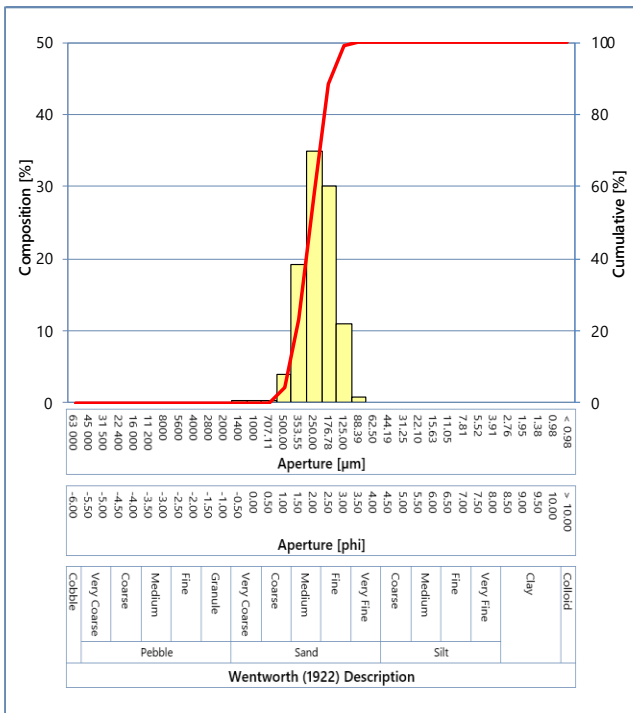


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.00	0.00
2000	-1.00	0.00	0.00
1400	-0.50	0.04	0.04
1000	0.00	0.02	0.06
707.11	0.50	0.08	0.14
500.00	1.00	4.09	4.22
353.55	1.50	19.12	23.35
250.00	2.00	34.87	58.22
176.78	2.50	30.01	88.23
125.00	3.00	11.02	99.25
88.39	3.50	0.75	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



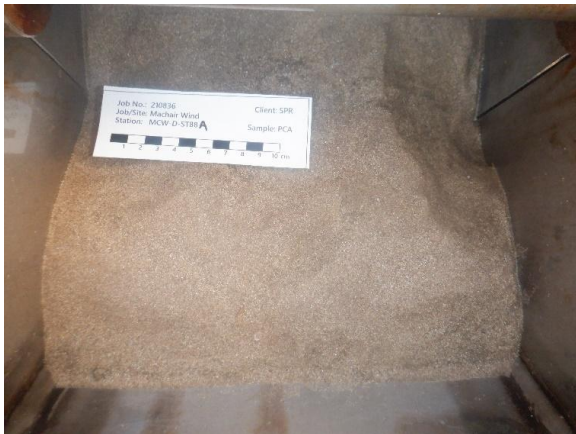
SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	271	Medium sand
Median [phi]*	1.88	
Mean [µm]*†	273	Medium sand
Mean [phi]*†	1.87	
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.55	
Skewness [µm]†	-0.01	Symmetrical
Skewness [phi]†	0.01	
Gravel [%]‡	0.00	Sand
Sand [%]‡	100.00	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



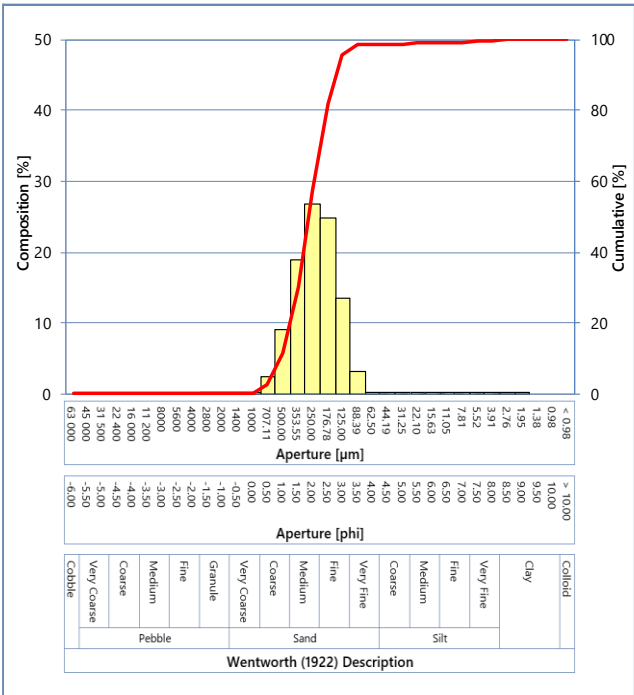
STATION: MCW-D-ST88A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.01	0.05
1400	-0.50	0.02	0.06
1000	0.00	0.07	0.13
707.11	0.50	2.49	2.62
500.00	1.00	8.99	11.61
353.55	1.50	18.82	30.43
250.00	2.00	26.67	57.10
176.78	2.50	24.79	81.89
125.00	3.00	13.59	95.48
88.39	3.50	3.04	98.53
62.50	4.00	0.00	98.53
44.19	4.50	0.00	98.53
31.25	5.00	0.18	98.72
22.10	5.50	0.25	98.97
15.63	6.00	0.13	99.09
11.05	6.50	0.08	99.17
7.81	7.00	0.18	99.35
5.52	7.50	0.24	99.59
3.91	8.00	0.23	99.82
2.76	8.50	0.16	99.98
1.95	9.00	0.02	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	274	Medium sand
Median [phi]*	1.87	
Mean [µm]*†	277	Medium sand
Mean [phi]*†	1.85	
Sorting [µm]†	1.65	Moderately sorted
Sorting [phi]†	0.72	
Skewness [µm]†	0.04	Symmetrical
Skewness [phi]†	-0.04	
Gravel [%]‡	0.05	
Sand [%]‡	98.48	Sand
Fines [%]‡	1.47	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



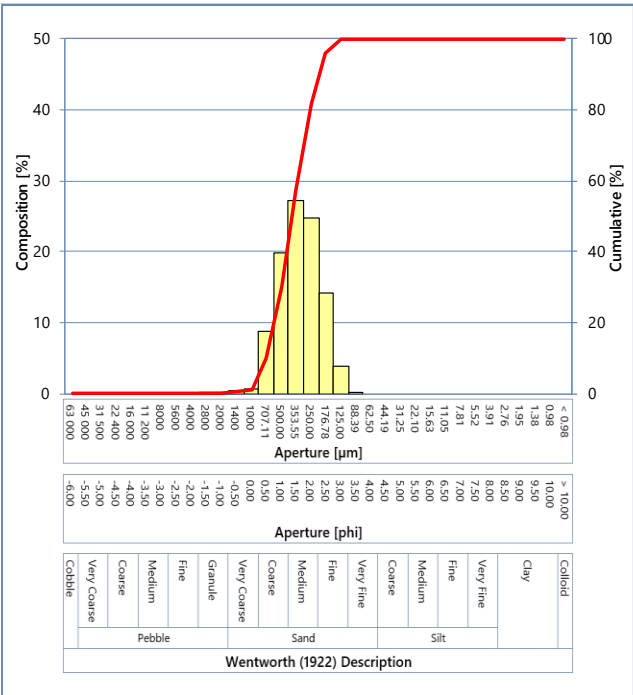
STATION: MCW-D-ST89A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.02	0.02
2000	-1.00	0.13	0.15
1400	-0.50	0.30	0.45
1000	0.00	0.69	1.15
707.11	0.50	8.84	9.99
500.00	1.00	19.88	29.87
353.55	1.50	27.21	57.08
250.00	2.00	24.82	81.90
176.78	2.50	14.24	96.14
125.00	3.00	3.80	99.94
88.39	3.50	0.06	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	427	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	387	Medium sand
Median [phi]*	1.37	
Mean [µm]*†	388	Medium sand
Mean [phi]*†	1.36	
Sorting [µm]†	1.62	Moderately well sorted
Sorting [phi]†	0.70	
Skewness [µm]†	0.02	Symmetrical
Skewness [phi]†	-0.02	
Gravel [%]‡	0.15	Sand
Sand [%]‡	99.85	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-D-ST95A

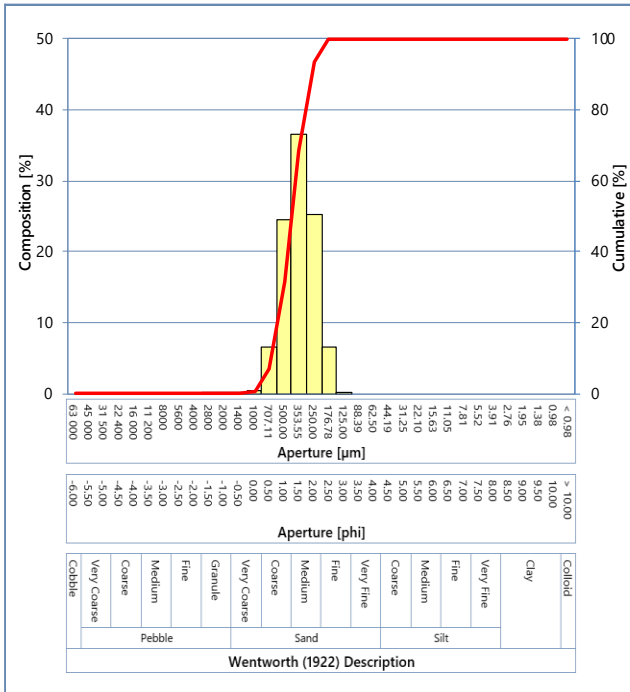


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.04	0.04
2000	-1.00	0.05	0.09
1400	-0.50	0.13	0.22
1000	0.00	0.33	0.55
707.11	0.50	6.47	7.02
500.00	1.00	24.60	31.62
353.55	1.50	36.66	68.29
250.00	2.00	25.15	93.43
176.78	2.50	6.45	99.89
125.00	3.00	0.11	100.00
88.39	3.50	0.00	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION

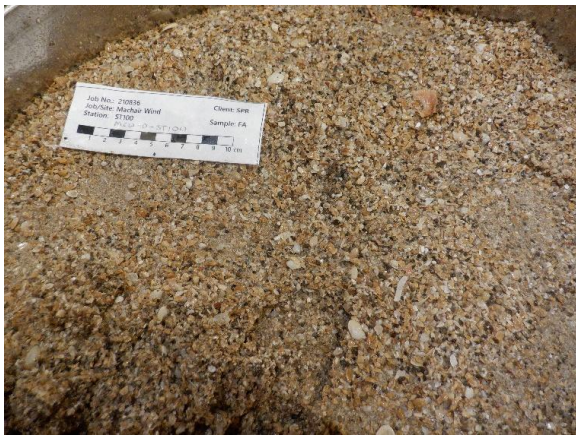


SUMMARY STATISTICS

Mode 1 [µm]*	427	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	420	Medium sand
Median [phi]*	1.25	
Mean [µm]*†	421	Medium sand
Mean [phi]*†	1.25	
Sorting [µm]†	1.47	Moderately well sorted
Sorting [phi]†	0.55	
Skewness [µm]†	0.01	Symmetrical
Skewness [phi]†	-0.01	
Gravel [%]†	0.09	Sand
Sand [%]†	99.91	
Fines [%]†	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

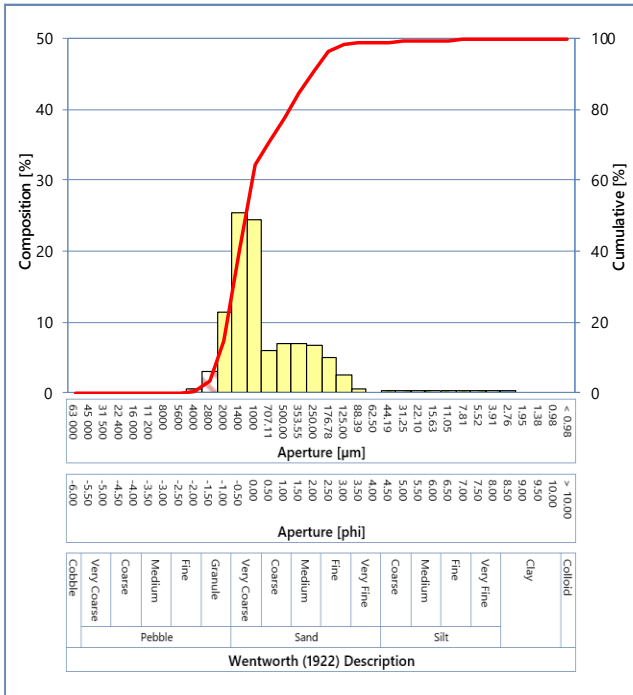
STATION: MCW-D-ST100A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.52	0.52
2800	-1.50	2.93	3.45
2000	-1.00	11.27	14.72
1400	-0.50	25.52	40.24
1000	0.00	24.41	64.65
707.11	0.50	5.98	70.62
500.00	1.00	6.89	77.51
353.55	1.50	7.03	84.55
250.00	2.00	6.65	91.20
176.78	2.50	5.01	96.21
125.00	3.00	2.43	98.64
88.39	3.50	0.45	99.09
62.50	4.00	0.00	99.09
44.19	4.50	0.03	99.12
31.25	5.00	0.17	99.29
22.10	5.50	0.15	99.44
15.63	6.00	0.10	99.54
11.05	6.50	0.10	99.65
7.81	7.00	0.12	99.77
5.52	7.50	0.11	99.88
3.91	8.00	0.09	99.97
2.76	8.50	0.03	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



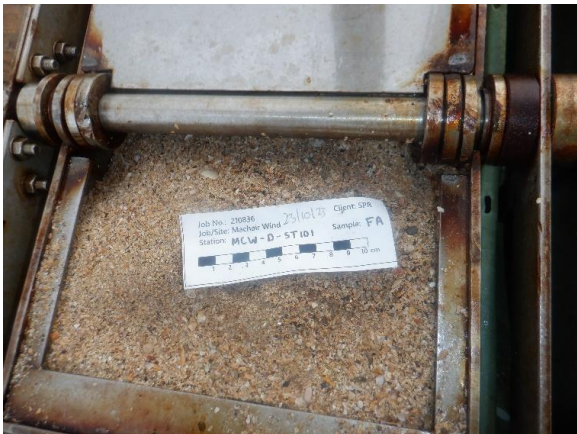
SUMMARY STATISTICS

Mode 1 [µm] [†]	1200	Very coarse sand
Mode 2 [µm] [†]	427	Medium sand
Mode 3 [µm] [†]	-	-
Median [µm] [†]	1224	Very coarse sand
Median [phi] [†]	-0.29	
Mean [µm] ^{†‡}	956	Coarse sand
Mean [phi] ^{†‡}	0.07	
Sorting [µm] [†]	2.27	Poorly sorted
Sorting [phi] [†]	1.18	
Skewness [µm] [†]	-0.42	Very fine skewed
Skewness [phi] [†]	0.42	
Gravel [%] [#]	14.72	
Sand [%] [#]	84.37	Gravelly sand
Fines [%] [#]	0.91	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



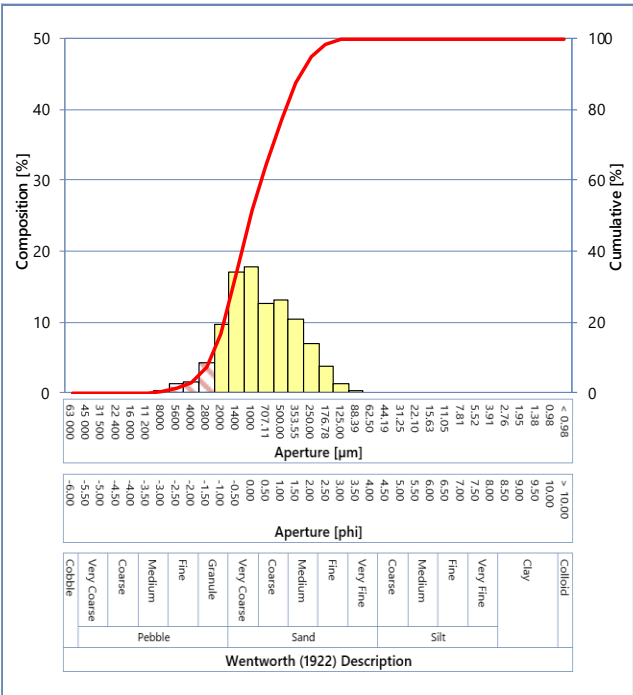
STATION: MCW-D-ST101



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.13	0.13
5600	-2.50	1.15	1.28
4000	-2.00	1.59	2.87
2800	-1.50	4.15	7.02
2000	-1.00	9.61	16.63
1400	-0.50	16.99	33.62
1000	0.00	17.89	51.51
707.11	0.50	12.69	64.20
500.00	1.00	13.11	77.31
353.55	1.50	10.48	87.79
250.00	2.00	7.03	94.81
176.78	2.50	3.75	98.56
125.00	3.00	1.30	99.86
88.39	3.50	0.14	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



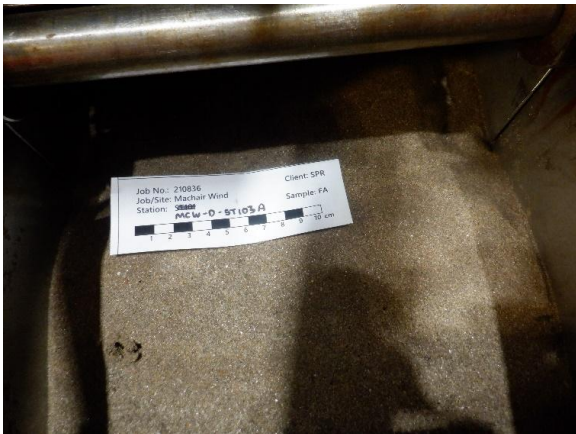
SUMMARY STATISTICS

Mode 1 [µm]*	1200	Very coarse sand
Mode 2 [µm]*	604	Coarse sand
Mode 3 [µm]*	-	-
Median [µm]*	1029	Very coarse sand
Median [phi]*	-0.04	
Mean [µm]*†	945	Coarse sand
Mean [phi]*†	0.08	
Sorting [µm]†	2.23	Poorly sorted
Sorting [phi]†	1.16	
Skewness [µm]†	-0.13	Fine skewed
Skewness [phi]†	0.13	
Gravel [%]‡	16.63	
Sand [%]‡	83.37	Gravelly sand
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



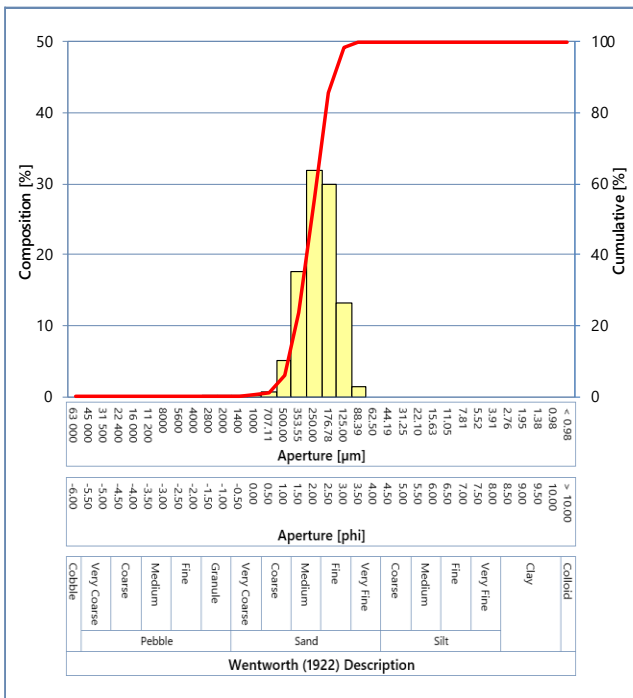
STATION: MCW-D-ST103A



FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.00	0.00
2800	-1.50	0.01	0.01
2000	-1.00	0.03	0.05
1400	-0.50	0.08	0.13
1000	0.00	0.23	0.35
707.11	0.50	0.60	0.96
500.00	1.00	4.99	5.95
353.55	1.50	17.63	23.58
250.00	2.00	31.87	55.45
176.78	2.50	29.98	85.44
125.00	3.00	13.16	98.59
88.39	3.50	1.41	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



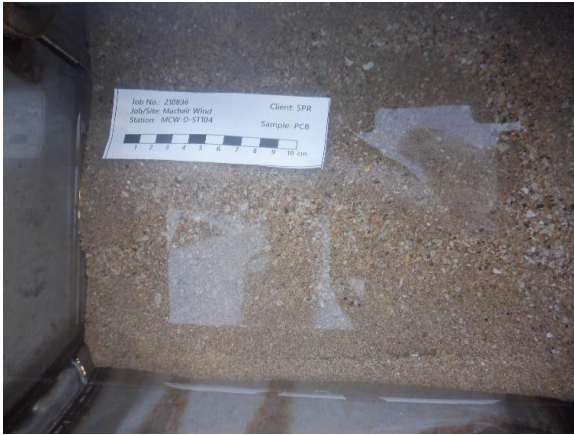
SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	-	-
Mode 3 [µm]*	-	-
Median [µm]*	265	Medium sand
Median [phi]*	1.91	
Mean [µm]*†	269	Medium sand
Mean [phi]*†	1.89	
Sorting [µm]†	1.51	Moderately well sorted
Sorting [phi]†	0.59	
Skewness [µm]†	0.04	Symmetrical
Skewness [phi]†	-0.04	
Gravel [%]‡	0.05	Sand
Sand [%]‡	99.95	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)



STATION: MCW-D-ST104

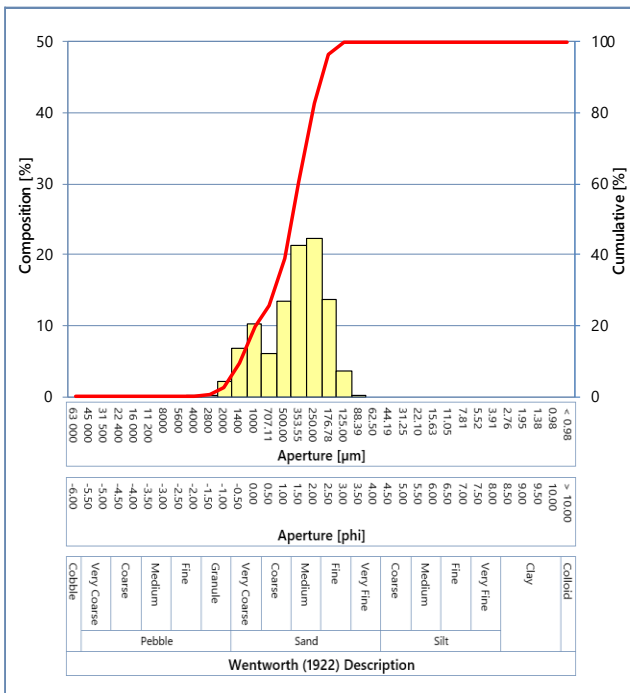


No photograph available

FRACTIONAL DATA

Aperture [µm]	Aperture [phi]	Fractional [%]	Cumulative [%]
63 000	-6.00	0.00	0.00
45 000	-5.50	0.00	0.00
31 500	-5.00	0.00	0.00
22 400	-4.50	0.00	0.00
16 000	-4.00	0.00	0.00
11 200	-3.50	0.00	0.00
8000	-3.00	0.00	0.00
5600	-2.50	0.00	0.00
4000	-2.00	0.08	0.08
2800	-1.50	0.27	0.35
2000	-1.00	2.14	2.48
1400	-0.50	6.91	9.40
1000	0.00	10.13	19.53
707.11	0.50	6.09	25.62
500.00	1.00	13.52	39.14
353.55	1.50	21.25	60.39
250.00	2.00	22.20	82.59
176.78	2.50	13.65	96.24
125.00	3.00	3.69	99.93
88.39	3.50	0.07	100.00
62.50	4.00	0.00	100.00
44.19	4.50	0.00	100.00
31.25	5.00	0.00	100.00
22.10	5.50	0.00	100.00
15.63	6.00	0.00	100.00
11.05	6.50	0.00	100.00
7.81	7.00	0.00	100.00
5.52	7.50	0.00	100.00
3.91	8.00	0.00	100.00
2.76	8.50	0.00	100.00
1.95	9.00	0.00	100.00
1.38	9.50	0.00	100.00
0.98	10.00	0.00	100.00
< 0.98	> 10.00	0.00	100.00
Total		100.00	-

PARTICLE SIZE DISTRIBUTION



SUMMARY STATISTICS

Mode 1 [µm]*	302	Medium sand
Mode 2 [µm]*	1200	Very coarse sand
Mode 3 [µm]*	-	-
Median [µm]*	419	Medium sand
Median [phi]*	1.26	Medium sand
Mean [µm]*†	484	Medium sand
Mean [phi]*†	1.05	Medium sand
Sorting [µm]†	2.07	Poorly sorted
Sorting [phi]†	1.05	Poorly sorted
Skewness [µm]†	0.27	Coarse skewed
Skewness [phi]†	-0.27	Coarse skewed
Gravel [%]‡	2.48	Sand
Sand [%]‡	97.52	
Fines [%]‡	0.00	

Notes
 Particle Size Distribution by Dry Sieving (63 000 µm - 1000 µm) and Laser Diffraction (< 1000 µm - < 0.98 µm) at 0.5 phi Intervals
 * = Particle size expressed in accordance with Wentworth (1922) scale
 † = Statistics calculated using Folk and Ward (1957) method
 ‡ = Description based on BGS modified Folk classification (Long, 2006)

Appendix F

Macrofaunal Analysis

F.1 Macrofauna Abundance

Taxon	Qualifier	SDC	AlphiaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
Cnidaria																	
<i>Virgularia mirabilis</i>		D0618	128539	(Müller, 1776)						1							1
ACTINIARIA		D0662	1360	Hertwig, 1882				1									
<i>Halcapa</i>		D0757	100740	Gosse, 1858													
Edwardsiidae		D0759	100665	Andres, 1881	6	8		4	2	2		1	1				
Platyhelminthes																	
PLATYHELMINTHES		F0001	793	Minot, 1876					1					1		1	
Nemertea																	
NEMERTEA		G0001	152391		1	1	5		2					1	1	7	
<i>Tubulanus polymorphus</i>		G0034	122637	Renier, 1804				1			2			1	1	3	1
<i>Cerebratulus</i>		G0039	122348	Renier, 1804			1	1			1					1	
Annelida																	
<i>Phascolion (Phascolion) strombus strombus</i>		N0034	410749	(Montagu, 1804)					1								
<i>Pisione remota</i>		P0015	130707	(Southern, 1914)													
<i>Pholoe inornata</i>		P0092	130601	Johnston, 1839				1									
<i>Pholoe baltica</i>		P0095	130599	Örsted, 1843		1					3						
<i>Sigalion mathildae</i>		P0104	131072	Audouin & Milne Edwards, 1832								1	1	1			1
<i>Sthenelais limicola</i>		P0109	131077	(Ehlers, 1864)	1	4	3	6	3	2	1	1	1	1	3	2	3
<i>Eteone longa</i>	Aggregate	P0118	130616	(Fabricius, 1780)													
<i>Hesionura elongata</i>		P0122	130649	(Southern, 1914)													
<i>Phyllodoce longipes</i>		P0143	130673	Kinberg, 1866	1												
<i>Phyllodoce rosea</i>		P0146	334514	(McIntosh, 1877)			1	1			2					1	
<i>Eulalia mustela</i>		P0155	130631	Pleijel, 1987													
<i>Eulalia viridis</i>		P0161	130639	(Linnaeus, 1767)				1									
<i>Eumida bahusiensis</i>		P0164	130641	Bergstrom, 1914	1		1	1						1		1	
<i>Glycera alba</i>		P0256	130116	(O.F. Müller, 1776)							1						
<i>Glycera lapidum</i>		P0260	130123	Quatrefages, 1866					1								
<i>Glycera oxycephala</i>		P0262	130126	Ehlers, 1887													
<i>Glycera unicornis</i>		P0263	130131	Lamarck, 1818													
<i>Glycinde nordmanni</i>		P0268	130136	(Malmgren, 1866)												1	
<i>Goniada maculata</i>		P0271	130140	Örsted, 1843			1	1						1		1	1
<i>Goniadella gracilis</i>		P0276	130145	(Verrill, 1873)													
<i>Psamathe fusca</i>		P0305	152249	Johnston, 1836													
<i>Oxydromus flexuosus</i>		P0313	710680	(Delle Chiaje, 1827)							1						

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Syllis garciai</i>		P0351	131431	(Campoy, 1982)													
<i>Syllis licheri</i>		P0358_B	238263	Ravara, San Martín & Moreira, 2004													
<i>Syllis armillaris</i>	Aggregate	P0365	131415	(O.F. Müller, 1776)				1									
<i>Streptosyllis websteri</i>		P0405	131402	Southern, 1914										1			
<i>Parexogone hebes</i>		P0421	757970	(Webster & Benedict, 1884)													
<i>Exogone naidina</i>		P0422	327985	Örsted, 1845													
<i>Sphaerosyllis bulbosa</i>		P0425	131379	Southern, 1914													
<i>Nereis zonata</i>		P0478	130407	Malmgren, 1867													
<i>Aglaophamus agilis</i>		P0493	130343	(Langerhans, 1880)					2								
<i>Nephtys assimilis</i>		P0495	130353	Örsted, 1843				1									
<i>Nephtys cirrosa</i>		P0498	130357	Ehlers, 1868				7		1					2		3
<i>Nephtys hombergii</i>		P0499	130359	Savigny in Lamarck, 1818							2		1				
<i>Aponuphis bilineata</i>		P0539	130452	(Baird, 1870)					13	1							
<i>Lumbrineris cingulata</i>		P0572_A	130240	Ehlers, 1897		1	5	2		3	1	1		3	1		4
<i>Ophryotrocha</i>		P0613	129266	Claparède & Mecznikow, 1869							1						
<i>Protodorvillea kefersteini</i>		P0638	130041	(McIntosh, 1869)													
<i>Schistomeringos neglecta</i>		P0642	130044	(Fauvel, 1923)													
<i>Orbinia armandi</i>		P0663	130518	(McIntosh, 1910)													
<i>Orbinia sertulata</i>		P0665	130523	(Savigny, 1822)													
<i>Scoloplos armiger</i>		P0672	130537	(Müller, 1776)			1			2				1			
<i>Aricidea (Aricidea) minuta</i>		P0677	730747	Southward, 1956													
<i>Aricidea (Acmira) catherinae</i>		P0684	333034	Laubier, 1967		2	1					1		1		3	
<i>Aricidea (Acmira) cerrutii</i>		P0685	525497	Laubier, 1966					1								
<i>Aricidea (Acmira) laubieri</i>		P0686	326587	Hartley, 1981		1											
<i>Apistobranchnus tullbergi</i>		P0712	129851	(Théel, 1879)			1									1	
<i>Poecilochaetus serpens</i>		P0718	130711	Allen, 1904	1	1	2	4	1								1
<i>Aonides paucibranchiata</i>		P0723	131107	Southern, 1914					3	1		2	2	2			1
<i>Laonice irinae</i>		P0731_A	1518242	Sikorski, Radashevsky & Nygren in Sikorski et al, 2021													
<i>Prionospio cirrifera</i>		P0747	131153	Wirén, 1883	1		1										
<i>Dipolydora caulleryi</i>		P0751	131116	(Mesnil, 1897)				1									
<i>Dipolydora saintjosephi</i>		P0761	131123	(Eliason, 1920)				2									
<i>Prionospio fallax</i>		P0765	131157	Söderström, 1920			3					1					
<i>Aurospio banyulensis</i>		P0766	146532	(Laubier, 1966)					1								
<i>Pseudopolydora pulchra</i>		P0774	131169	(Carazzi, 1893)					1					1			
<i>Scolecopsis korsuni</i>		P0777_A	131174	Sikorski, 1994					2								

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Scolecopsis bonnieri</i>		P0779	131171	(Mesnil, 1896)	1												
<i>Spio symphyta</i>		P0787_C	596189	Meißner, Bick & Bastrop, 2011	1	1			1				1		1		
<i>Spio decorata</i>		P0789	152314	Bobretzky, 1870			1		2			1					
<i>Spiophanes bombyx</i>	Aggregate	P0794	131187	(Claparède, 1870)	5	2	4	5	1	8		2	2	2	4	5	8
<i>Spiophanes kroyeri</i>	Aggregate	P0796	131188	Grube, 1860	3	1	4										
<i>Magelona johnstoni</i>		P0803_A	130269	Fiege, Licher & Mackie, 2000	7								2	4			
<i>Magelona alleni</i>		P0804	130266	Wilson, 1958		1	1						1			1	
<i>Magelona filiformis</i>		P0805	130268	Wilson, 1959	6	11	1					6	5	10		10	1
<i>Magelona mirabilis</i>		P0807	130271	(Johnston, 1865)													
<i>Chaetopterus</i>		P0811	129229	Cuvier, 1830					3								
<i>Spiochaetopterus</i>		P0818	129233	M Sars, 1856													
<i>Aphelochaeta</i>	Species A	P0823	129240	Blake, 1991		3		1									
<i>Aphelochaeta</i>		P0823	129240	Blake, 1991				1									
<i>Caulleriella alata</i>		P0829	129943	(Southern, 1914)													
<i>Chaetozone zetlandica</i>		P0831	336485	McIntosh, 1911							1						
<i>Chaetozone christiei</i>		P0832_A	152217	Chambers, 2000	14	20	4	1			1	7	10	13	1	15	1
<i>Chaetozone setosa</i>		P0834	129955	Malmgren, 1867							3						
<i>Dodecaceria</i>		P0840	129246	Örsted, 1843								1					
<i>Tharyx killariensis</i>		P0846	152269	(Southern, 1914)	1		2				6	1		2		1	
<i>Diplocirrus glaucus</i>		P0878	130100	(Malmgren, 1867)			2									1	
<i>Mediomastus fragilis</i>		P0919	129892	Rasmussen, 1973													
<i>Notomastus</i>		P0920	129220	M. Sars, 1851					6	1							
<i>Praxillura longissima</i>		P0944	130327	Arwidsson, 1906									2			3	
<i>Euclymene</i>	Species A	P0960	129347	Verrill, 1900							1						
<i>Euclymene oerstedii</i>		P0964	130294	(Claparède, 1863)							22						
<i>Ophelia borealis</i>		P0999	130491	Quatrefages, 1866						2					1		3
<i>Travisia forbesii</i>		P1007	130512	Johnston, 1840											2		
<i>Ophelina acuminata</i>		P1014	130500	Örsted, 1843							5						
<i>Scalibregma inflatum</i>		P1027	130980	Rathke, 1843		1	2										
<i>Scalibregma hanseni</i>		P1027_A	746615	Bakken, Oug & Kongsrud, 2014										1			
Polygordiidae		P1061	993	Czerniavsky, 1881													
<i>Galathowenia oculata</i>		P1093	146950	(Zachs, 1923)	2	6	4				26	14	1	8		5	
<i>Myriochele danielsseni</i>		P1095	130540	Hansen, 1878	2	3	12	2			9	25	11	8		15	3
<i>Owenia</i>		P1097	129427	Delle Chiaje, 1844	1			1	2	4	5			1			
<i>Amphictene auricoma</i>		P1102	152448	(O.F. Müller, 1776)							1						

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Lagis koreni</i>		P1107	152367	Malmgren, 1866				1			2						
<i>Sabellaria spinulosa</i>		P1117	130867	(Leuckart, 1849)					1								
<i>Ampharete falcata</i>		P1135	129777	Eliason, 1955												1	
<i>Ampharete lindstroemi</i>		P1139	129781	Hessle, 1917	2	1	6	1					2				
<i>Ampharete octocirrata</i>		P1160	332932	(Sars, 1835)							1						
<i>Terebellides</i>		P1174	129717	Sars, 1835			1										
<i>Eupolymnia nebulosa</i>		P1189	131489	(Montagu, 1819)							4						
<i>Lanice conchilega</i>		P1195	131495	(Pallas, 1766)	1	1	2	1			1	1		1			
<i>Phisidia aurea</i>		P1215	131513	Southward, 1956													
<i>Pista bansei</i>		P1219_B	152254	Saphronova, 1988													
<i>Polycirrus</i>		P1235	129710	Grube, 1850													1
<i>Dialychone</i>		P1264_C	155472	Claparède, 1868													
<i>Hydroides norvegica</i>		P1334	131009	Gunnerus, 1768				7									
<i>Tubificoides amplivasatus</i>		P1489	137570	(Erséus, 1975)							2						
Enchytraeidae		P1501	2038	d'Udekem, 1855													
HIRUDINEA		P1579	2041	Savigny, 1822													
Arthropoda																	
<i>Anoplodactylus petiolatus</i>		Q0044	134723	(Krøyer, 1844)							3	1					
<i>Periculodes longimanus</i>		S0131	102915	(Spence Bate & Westwood, 1868)													
<i>Synchelidium maculatum</i>		S0138	102928	Stebbing, 1906	1			1						2			
<i>Harpinia antennaria</i>		S0254	102960	Meinert, 1890		1	2				2			1			
<i>Hippomedon denticulatus</i>		S0296	102570	(Spence Bate, 1857)		1											
<i>Lepidepcreum longicorne</i>		S0301	102598	(Spence Bate & Westwood, 1861)													
<i>Lysianassa plumosa</i>		S0305	102611	Boeck, 1871													
<i>Tryphosella nanoides</i>		S0343	102764	(Lilljeborg, 1865)													
<i>Argissa hamatipes</i>		S0360	102064	(Norman, 1869)													
<i>Iphimedia perplexa</i>		S0383	102348	Myers & Costello, in Myers, McGrath & Costello, 1987													
<i>Nototropis falcatus</i>		S0410	102139	(Metzger, 1871)													
<i>Ampelisca brevicornis</i>		S0427	101891	(A. Costa, 1853)		1	1	1				1	1	4		2	
<i>Ampelisca diadema</i>		S0429	101896	(A. Costa, 1853)													
<i>Ampelisca tenuicornis</i>		S0440	101930	Liljeborg, 1856		1			1		2						
<i>Bathyporeia elegans</i>		S0452	103058	Watkin, 1938				3		6	1	3	4	5			8
<i>Bathyporeia guilliamsoniana</i>		S0454	103060	(Spence Bate, 1857)				1				1			1		7
<i>Bathyporeia tenuipes</i>		S0459	103076	Meinert, 1877	4	2	1	5				2	5	4		3	

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Megaluropus agilis</i>		S0489	102783	Hoek, 1889				1						1			
<i>Abludomelita obtusata</i>		S0498	102788	(Montagu, 1813)							1						
Aoridae		S0577	101368	Stebbing, 1899											1		
<i>Centraloecetes kroyeranus</i>		S0618	1059646	(Spence Bate, 1857)										2	1		
<i>Centraloecetes striatus</i>		S0619	1059649	(Myers & McGrath, 1979)										2			
<i>Pariambus typicus</i>		S0651	101857	(Krøyer, 1845)					1								
<i>Gnathia oxyuraea</i>		S0796	118995	(Lilljeborg, 1855)					1								
<i>Astacilla dilatata</i>		S0951	295579	G. O. Sars, 1883													1
<i>Tanaopsis graciloides</i>		S1142	136458	(Lilljeborg, 1864)							2						
<i>Eudorellopsis deformis</i>		S1210	110536	(Krøyer, 1846)								1					
<i>Pseudocuma (Pseudocuma) simile</i>		S1237	110628	G.O. Sars, 1900				1	3								
<i>Diastylis bradyi</i>		S1248	110472	Norman, 1879										1			
<i>Diastylis laevis</i>		S1251	110481	Norman, 1869			1				5						
<i>Diastylis rugosa</i>		S1254	110488	Sars, 1865				1									
<i>Processa nouveli holthuisi</i>		S1367	108344	Al-Adhub & Williamson, 1975			1										
<i>Philocheras trispinosus</i>		S1390	107562	(Hailstone <i>in</i> Hailstone & Westwood, 1835)					1								
<i>Pagurus cuanensis</i>		S1460	107235	Bell, 1845				1									
<i>Galathea intermedia</i>		S1472	107150	Lilljeborg, 1851				1									
<i>Ebalia tuberosa</i>		S1508	107301	(Pennant, 1777)													
<i>Pinnotheres pisum</i>		S1638	107473	(Linnaeus, 1767)													1
Mollusca																	
<i>Chaetoderma nitidulum</i>		W0009	139106	Lovén, 1844							1						
<i>Ceratia proxima</i>		W0408	140128	(Forbes & Hanley, 1850)			3										
<i>Aporrhais pespelecani</i>		W0430	138760	(Linnaeus, 1758)								2					
<i>Erato voluta</i>		W0465	139761	(Montagu, 1803)				1									
<i>Euspira nitida</i>		W0491	151894	(Donovan, 1803)	1	1		1	1	3			1				
<i>Epitonium trevelyanum</i>		W0553	139736	(G. Johnston, 1841)													
<i>Eulima bilineata</i>		W0603	139800	Alder, 1848													
<i>Bela nebula</i>		W0801	139217	(Montagu, 1803)													
<i>Megastomia conoidea</i>		W0952	224401	(Brocchi, 1814)										1			
<i>Pyrgiscus crenatus</i>		W0985	836211	(T. Brown, 1827)	1												1
<i>Acteon tornatilis</i>		W1006	138691	(Linnaeus, 1758)				1			1			1			
<i>Cylichna cylindracea</i>		W1028	139476	(Pennant, 1777)	2	1	1				3			1		3	
<i>Hermania scabra/indistincta</i>		W1045	867492/867493														
NUDIBRANCHIA		W1243	1762	Cuvier, 1817					1								
<i>Antalis entalis</i>		W1519	150534	(Linnaeus, 1758)									1	1			

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Nucula nitidosa</i>		W1569	140589	Winckworth, 1930	3	9	4	6			8	1	2	2		6	2
<i>Glycymeris glycymeris</i>		W1688	140025	(Linnaeus, 1758)													
Anomiidae		W1805	214	Rafinesque, 1815							1						
<i>Myrtea spinifera</i>		W1827	140287	(Montagu, 1803)							1						
<i>Lucinoma borealis</i>		W1829	140283	(Linnaeus, 1767)			1					2					
<i>Thyasira flexuosa</i>		W1837	141662	(Montagu, 1803)	2		2					1	3			3	
<i>Kurtiella bidentata</i>		W1906	345281	(Montagu, 1803)							15						
<i>Goodallia triangularis</i>		W1929	138831	(Montagu, 1803)					1								
<i>Acanthocardia echinata</i>		W1943	138992	(Linnaeus, 1758)										1			
<i>Spisula elliptica</i>		W1975	140300	(T. Brown, 1827)													
<i>Phaxas pellucidus</i>		W2006	140737	(Pennant, 1777)	1		4				5		2				
<i>Arcopagia crassa</i>		W2015	141577	(Pennant, 1777)													
<i>Fabulina fabula</i>		W2019	146907	(Gmelin, 1791)	2	2							3			1	
<i>Asbjornsenia pygmaea</i>		W2023	879714	(Lovén, 1846)			2		1	1							
<i>Gari fervensis</i>		W2051	140870	(Gmelin, 1791)				1									
<i>Abra alba</i>		W2059	141433	(W. Wood, 1802)		3	4				1						
<i>Abra prismatica</i>		W2062	141436	(Montagu, 1808)	1	1	3	9		1			2	2	2	4	2
<i>Arctica islandica</i>		W2072	138802	(Linnaeus, 1767)			1										
<i>Chamelea striatula</i>		W2097_A	141908	(da Costa, 1778)	1								1	2		1	1
<i>Timoclea ovata</i>		W2104	141929	(Pennant, 1777)									1				
<i>Mysia undata</i>		W2139	140728	(Pennant, 1777)					4								
<i>Varicorbula gibba</i>		W2157	378492	(Olivi, 1792)			1				1						
<i>Hiatella arctica</i>		W2166	140103	(Linnaeus, 1767)							1						
<i>Thracia phaseolina</i>		W2231	152378	(Lamarck, 1818)													
<i>Cochlodesma praetenuae</i>		W2239	181373	(Pulteney, 1799)								2					2
<i>Lyonsia norwegica</i>		W2247	140291	(Gmelin, 1791)													
<i>Pandora pinna</i>		W2252	140675	(Montagu, 1803)		1											1
Phoronida																	
<i>Phoronis</i>		ZA0003	128545	Wright, 1856	3	1	4					2		1		1	
Echinodermata																	
<i>Astropecten irregularis</i>		ZB0026	123867	(Pennant, 1777)				1									
<i>Acrocrida brachiata</i>		ZB0151	236130	(Montagu, 1804)		1							1				
<i>Amphiura filiformis</i>		ZB0154	125080	(O.F. Müller, 1776)							17						
<i>Ophiura albida</i>		ZB0168	124913	Forbes, 1839							1						

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<i>Echinocyamus pusillus</i>		ZB021 2	124273	(O.F. Müller, 1776)	1	1	2	2	11	10		1		3	2	1	15
<i>Echinocardium cordatum</i>		ZB022 3	124392	(Pennant, 1777)		1								1			2
<i>Echinocardium flavescens</i>		ZB022 4	124394	(O.F. Müller, 1776)							1						
<i>Leptosynapta bergensis</i>		ZB029 2	124462	(Östergren, 1905)	1						2						
<i>Oestergrenia digitata</i>		ZB030 0	152547	(Montagu, 1815)		1	1						2				
Hemichordata																	
ENTEROPNEUSTA		ZC001 2	1820	Gegenbaur, 1870	2		3			1		3	1				
Taxa					35	37	47	45	32	18	47	27	32	45	14	32	27
Abundance					84	99	114	95	76	50	178	86	74	108	23	105	76
The following taxa (highlighted below) are merged in the rationalised dataset above																	
Aoridae	Female	S0577	101368	Stebbing, 1899													
<i>Autonoe longipes</i>		S0583	102021	(Liljeborg, 1852)											1		
Aoridae		S0577	101368	Stebbing, 1899											1		
The following taxa were excluded from the analysis																	
Juveniles																	
HEXACORALLIA	Juvenile	D0627	1340	Haeckel, 1896													
SIPUNCULA	Juvenile	N0001	1268	Stephen, 1965													
Aphroditidae	Juvenile	P0017	938	Malmgren, 1867				1									
Polynoidae	Juvenile	P0025	939	Kinberg, 1856		2											
<i>Sthenelais</i>	Juvenile	P0106	129595	Kinberg, 1856	1	2											
<i>Eumida</i>	Juvenile	P0163	129446	Malmgren, 1865					1								
<i>Syllis</i>	Juvenile	P0358	129680	Lamarck, 1818													
Nephtyidae	Juvenile	P0490	956	Grube, 1850	1			1	1			1					
Lumbrineridae	Juvenile	P0569	967	Schmarda, 1861			1							2			
Pectinariidae	Juvenile	P1100	980	Quatrefages, 1866	1			1									
Terebellidae	Juvenile	P1179	982	Johnston, 1846					2								
<i>Hippolyte</i>	Juvenile	S1346	106987	Leach, 1814				1									
Callianassidae	Juvenile	S1413	106800	Dana, 1852	1												
<i>Liocarcinus</i>	Juvenile	S1577	106925	Stimpson, 1871							1						
Philineidae	Juvenile	W1035	161	Gray, 1850 (1815)				1									
BIVALVIA	Juvenile	W1560	105	Linnaeus, 1758				1									
<i>Nucula</i>	Juvenile	W1565	138262	Lamarck, 1799	1	1	1	2			2	1	1	1	1		1
<i>Mytilus</i>	Juvenile	W1693	138228	Linnaeus, 1758			1										
Thyasiridae	Juvenile	W1833	219	Dall, 1900 (1895)	2		1	2					1	1			

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
Mastrinae	Juvenile	W1968	152831	Lamarck, 1809													
<i>Spisula</i>	Juvenile	W1973	138159	J. E. Gray, 1837					1								
<i>Gari</i>	Juvenile	W2044	138388	Schumacher, 1817													1
<i>Abra</i>	Juvenile	W2058	138474	Lamarck, 1818						1		1		1			
<i>Arctica islandica</i>	Juvenile	W2072	138802	(Linnaeus, 1767)	1							2			3		2
Veneridae	Juvenile	W2086	243	Rafinesque, 1815				1									1
<i>Dosinia</i>	Juvenile	W2126	138636	Scopoli, 1777			1	2		1		4	2	6	1	1	3
THRACIOIDEA	Juvenile	W2225	382318	Stoliczka, 1870 (1839)													
OPHIUROIDEA	Juvenile	ZB0105	123084	Gray, 1840		2	1	15				5		11	2	4	
Amphiuridae	Juvenile	ZB0148	123206	Ljungman, 1867	1	9	8	8			8		9	17	4	20	17
Ophiuridae	Juvenile	ZB0165	123200	Müller & Troschel, 1840							1						
SPATANGOIDA	Juvenile	ZB0213	123106	L. Agassiz, 1840			2	2	1	3		3	1	6	4	6	16
<i>Echinocardium</i>	Juvenile	ZB0222	123426	Gray, 1825				1						2	2		2
DENDROCHIROTIDA	Juvenile	ZB0249	123111	Grube, 1840												1	1
ASCIDIACEA	Juvenile	ZD0002	1839	Blainville, 1824				3	2	7					21		1
Ammodytidae	Juvenile	ZG0441	125516	Bonaparte, 1835													
Damaged																	
Polynoidae	Damaged	P0025	939	Kinberg, 1856				1									
Phyllodocidae	Damaged	P0114	931	Örsted, 1843				2									
<i>Eumida</i>	Damaged	P0163	129446	Malmgren, 1865													
<i>Orbinia</i>	Damaged	P0661	129420	Quatrefages, 1866													
Maldanidae	Damaged	P0938	923	Malmgren, 1867							1						
Serpulidae	Damaged	P1324	988	Rafinesque, 1815				7									
<i>Diastylis</i>	Damaged	S1247	110398	Say, 1818								1					
Ammodytidae	Damaged	ZG0441	125516	Bonaparte, 1835													
Epifauna																	
PORIFERA		C0001	558	Grant, 1836							P						
ANTHOATHECATA		D0140	13551	Cornelius, 1992													
Tubulariidae		D0158	1603	Goldfuss, 1818													
FILIFERA		D0216	16352	Kühn, 1913										P			
<i>Eudendrium</i>		D0218	117093	Ehrenberg, 1834							P						
LEPTOTHECATA		D0295	13552	Cornelius, 1992			P						P	P			

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-A-ST01FA	MCW-A-ST02FA	MCW-A-ST03FA	MCW-A-ST07AFA	MCW-A-ST08AFA	MCW-A-ST44AFA	MCW-B-ST09AFA	MCW-B-ST10FA	MCW-B-ST17AFA	MCW-B-ST18AFA	MCW-B-ST19AFA	MCW-B-ST29AFA	MCW-B-ST30AFA
<i>Lovenella clausa</i>		D0336	117736	(Lovén, 1836)	P	P		P		P		P			P	P	P
Campanulariidae		D0491	1606	Johnston, 1836							P						
SESSILIA		R0015_A	106033	Lamarck, 1818				P				P					
<i>Verruca stroemia</i>		R0041	106257	(O.F. Müller, 1776)													
Crisiidae		Y0004	110806	Johnston, 1838							P						
<i>Vesicularia spinosa</i>		Y0131	111669	(Linnaeus, 1758)											P		
<i>Amathia lendigera</i>		Y0135	111659	(Linnaeus, 1758)													
CHEILOSTOMATIDA		Y0149	110722	Busk, 1852				P									
<i>Aetea</i>		Y0153	110819	Lamouroux, 1812													
<i>Eucratea loricata</i>		Y0165	111361	(Linnaeus, 1758)													
<i>Electra pilosa</i>		Y0178	111355	(Linnaeus, 1767)							P						
<i>Flustra foliacea</i>		Y0187	111367	(Linnaeus, 1758)													
Candidae		Y0265	110734	d'Orbigny, 1851									P				
<i>Celleporella hyalina</i>		Y0337	111397	(Linnaeus, 1767)							P						
Algae																	
<i>Polysiphonia stricta</i>	?	ZM0679	144672	(Mertens ex Dillwyn) Greville, 1824							P						
<i>Hypoglossum hypoglossoides</i>		ZM610	144756	(Stackhouse) Collins & Hervey, 1917							P						
Meiofauna																	
NEMATODA		HD0001	799								2						
COPEPODA		R0142	1080	Milne Edwards, 1840		1											
Fish																	
<i>Ammodytes marinus</i>		ZG0443	126751	Raitt, 1934													
Taxa					9	7	9	21	6	5	14	10	7	11	10	6	11
Abundance					9	17	16	52	8	12	15	18	14	47	38	32	45

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST20FA	MCW-C-ST31FA	MCW-C-ST32FA	MCW-C-ST41FA	MCW-C-ST42FA	MCW-C-ST43FA	MCW-C-ST52FA	MCW-C-ST53FA	MCW-C-ST54FA	MCW-C-ST62FA	MCW-C-ST63FA	MCW-C-ST70FA	MCW-C-ST71FA
Cnidaria																	
<i>Virgularia mirabilis</i>		D0618	128539	(Müller, 1776)													
ACTINIARIA		D0662	1360	Hertwig, 1882													
<i>Halcampa</i>		D0757	100740	Gosse, 1858							1						
Edwardsiidae		D0759	100665	Andres, 1881			1	2	1		1	1	1	3	2	4	1
Platyhelminthes																	
PLATYHELMINTHES		F0001	793	Minot, 1876													
Nemertea																	
NEMERTEA		G0001	152391									1					1
<i>Tubulanus polymorphus</i>		G0034	122637	Renier, 1804	3	1	1	2		1	1	3	6	5	1	5	1
<i>Cerebratulus</i>		G0039	122348	Renier, 1804	1	1		1									
Annelida																	
<i>Phascolion (Phascolion) strombus strombus</i>		N0034	410749	(Montagu, 1804)													
<i>Pisione remota</i>		P0015	130707	(Southern, 1914)													
<i>Pholoe inornata</i>		P0092	130601	Johnston, 1839													
<i>Pholoe baltica</i>		P0095	130599	Örsted, 1843													
<i>Sigalion mathildae</i>		P0104	131072	Audouin & Milne Edwards, 1832								2		1		1	
<i>Sthenelais limicola</i>		P0109	131077	(Ehlers, 1864)	1	2	5	7	2	4	3	1	2	2	2	2	
<i>Eteone longa</i>	Aggregate	P0118	130616	(Fabricius, 1780)				4									
<i>Hesionura elongata</i>		P0122	130649	(Southern, 1914)													
<i>Phyllodoce longipes</i>		P0143	130673	Kinberg, 1866		1						1					
<i>Phyllodoce rosea</i>		P0146	334514	(McIntosh, 1877)	4	4				2	1	1		1	1		
<i>Eulalia mustela</i>		P0155	130631	Pleijel, 1987													
<i>Eulalia viridis</i>		P0161	130639	(Linnaeus, 1767)													
<i>Eumida bahusiensis</i>		P0164	130641	Bergstrom, 1914				1									
<i>Glycera alba</i>		P0256	130116	(O.F. Müller, 1776)		1											
<i>Glycera lapidum</i>		P0260	130123	Quatrefages, 1866													
<i>Glycera oxycephala</i>		P0262	130126	Ehlers, 1887				1									
<i>Glycera unicornis</i>		P0263	130131	Lamarck, 1818				2									
<i>Glycinde nordmanni</i>		P0268	130136	(Malmgren, 1866)													
<i>Goniada maculata</i>		P0271	130140	Örsted, 1843													
<i>Goniadella gracilis</i>		P0276	130145	(Verrill, 1873)													
<i>Psamathe fusca</i>		P0305	152249	Johnston, 1836													
<i>Oxydromus flexuosus</i>		P0313	710680	(Delle Chiaje, 1827)													
<i>Syllis garciai</i>		P0351	131431	(Campoy, 1982)													
<i>Syllis licheri</i>		P0358_B	238263	Ravara, San Martín & Moreira, 2004													

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST20FA	MCW-C-ST31FA	MCW-C-ST32FA	MCW-C-ST41FA	MCW-C-ST42FA	MCW-C-ST43FA	MCW-C-ST52FA	MCW-C-ST53FA	MCW-C-ST54FA	MCW-C-ST62FA	MCW-C-ST63FA	MCW-C-ST70FA	MCW-C-ST71FA
<i>Syllis armillaris</i>	Aggregate	P0365	131415	(O.F. Müller, 1776)													
<i>Streptosyllis websteri</i>		P0405	131402	Southern, 1914				1									
<i>Parexogone hebes</i>		P0421	757970	(Webster & Benedict, 1884)													
<i>Exogone naidina</i>		P0422	327985	Örsted, 1845	1												
<i>Sphaerosyllis bulbosa</i>		P0425	131379	Southern, 1914													
<i>Nereis zonata</i>		P0478	130407	Malmgren, 1867													
<i>Aglaophamus agilis</i>		P0493	130343	(Langerhans, 1880)													
<i>Nephtys assimilis</i>		P0495	130353	Örsted, 1843										1			
<i>Nephtys cirrosa</i>		P0498	130357	Ehlers, 1868	2	1		5	2	1	4	1		1			
<i>Nephtys hombergii</i>		P0499	130359	Savigny in Lamarck, 1818													
<i>Aponuphis bilineata</i>		P0539	130452	(Baird, 1870)				3	1								
<i>Lumbrineris cingulata</i>		P0572_A	130240	Ehlers, 1897	1	5	4		4				3		1	5	9
<i>Ophryotrocha</i>		P0613	129266	Claparède & Mecznirow, 1869													
<i>Protodorvillea kefersteini</i>		P0638	130041	(McIntosh, 1869)													
<i>Schistomeringos neglecta</i>		P0642	130044	(Fauvel, 1923)													
<i>Orbinia armandi</i>		P0663	130518	(McIntosh, 1910)													
<i>Orbinia sertulata</i>		P0665	130523	(Savigny, 1822)											1		
<i>Scoloplos armiger</i>		P0672	130537	(Müller, 1776)		1	1					1	2				1
<i>Aricidea (Aricidea) minuta</i>		P0677	730747	Southward, 1956													
<i>Aricidea (Acmira) catherinae</i>		P0684	333034	Laubier, 1967							1						
<i>Aricidea (Acmira) cerrutii</i>		P0685	525497	Laubier, 1966													
<i>Aricidea (Acmira) laubieri</i>		P0686	326587	Hartley, 1981													
<i>Apistobranchnus tullbergi</i>		P0712	129851	(Théel, 1879)													
<i>Poecilochaetus serpens</i>		P0718	130711	Allen, 1904			2	14			1	1	4	1	3	1	
<i>Aonides paucibranchiata</i>		P0723	131107	Southern, 1914		3	1				3		1	1			
<i>Laonice irinae</i>		P0731_A	1518242	Sikorski, Radashevsky & Nygren in Sikorski et al, 2021													
<i>Prionospio cirrifera</i>		P0747	131153	Wirén, 1883													
<i>Dipolydora caulleryi</i>		P0751	131116	(Mesnil, 1897)													
<i>Dipolydora saintjosephi</i>		P0761	131123	(Eliason, 1920)													
<i>Prionospio fallax</i>		P0765	131157	Söderström, 1920													
<i>Aurospio banyulensis</i>		P0766	146532	(Laubier, 1966)													
<i>Pseudopolydora pulchra</i>		P0774	131169	(Carazzi, 1893)		1		1									
<i>Scolelepis korsuni</i>		P0777_A	131174	Sikorski, 1994													
<i>Scolelepis bonnierii</i>		P0779	131171	(Mesnil, 1896)													
<i>Spio symphyta</i>		P0787_C	596189	Meißner, Bick & Bastrop, 2011				3						2			

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<i>Spio decorata</i>		P0789	152314	Bobretzky, 1870		1											
<i>Spiophanes bombyx</i>	Aggregate	P0794	131187	(Claparède, 1870)	4	7	7	16	4	11	4	8	4	14	1	2	1
<i>Spiophanes kroyeri</i>	Aggregate	P0796	131188	Grube, 1860								1					
<i>Magelona johnstoni</i>		P0803_A	130269	Fiege, Licher & Mackie, 2000								2	1	5		2	3
<i>Magelona alleni</i>		P0804	130266	Wilson, 1958													
<i>Magelona filiformis</i>		P0805	130268	Wilson, 1959								4	2	6	1	7	1
<i>Magelona mirabilis</i>		P0807	130271	(Johnston, 1865)	1												
<i>Chaetopterus</i>		P0811	129229	Cuvier, 1830													
<i>Spiochaetopterus</i>		P0818	129233	M Sars, 1856		1										1	
<i>Aphelochaeta</i>	Species A	P0823	129240	Blake, 1991													
<i>Aphelochaeta</i>		P0823	129240	Blake, 1991													
<i>Caulleriella alata</i>		P0829	129943	(Southern, 1914)													
<i>Chaetozone zetlandica</i>		P0831	336485	McIntosh, 1911													
<i>Chaetozone christiei</i>		P0832_A	152217	Chambers, 2000		1		1	1	1	1	1	5		2	1	2
<i>Chaetozone setosa</i>		P0834	129955	Malmgren, 1867													
<i>Dodecaceria</i>		P0840	129246	Örsted, 1843													
<i>Tharyx killariensis</i>		P0846	152269	(Southern, 1914)													
<i>Diplocirrus glaucus</i>		P0878	130100	(Malmgren, 1867)													
<i>Mediomastus fragilis</i>		P0919	129892	Rasmussen, 1973													
<i>Notomastus</i>		P0920	129220	M. Sars, 1851		8		9	2	1		1					
<i>Praxillura longissima</i>		P0944	130327	Arwidsson, 1906													
<i>Euclymene</i>	Species A	P0960	129347	Verrill, 1900													
<i>Euclymene oerstedii</i>		P0964	130294	(Claparède, 1863)													
<i>Ophelia borealis</i>		P0999	130491	Quatrefages, 1866		1	1		2	3							
<i>Travisia forbesii</i>		P1007	130512	Johnston, 1840	1												
<i>Ophelina acuminata</i>		P1014	130500	Örsted, 1843													
<i>Scalibregma inflatum</i>		P1027	130980	Rathke, 1843											1		
<i>Scalibregma hanseni</i>		P1027_A	746615	Bakken, Oug & Kongsrud, 2014													
Polygordiidae		P1061	993	Czerniavsky, 1881													
<i>Galathowenia oculata</i>		P1093	146950	(Zachs, 1923)								6	3		4		
<i>Myriochele danielsseni</i>		P1095	130540	Hansen, 1878									1				
<i>Owenia</i>		P1097	129427	Delle Chiaje, 1844		1		1									
<i>Amphictene auricoma</i>		P1102	152448	(O.F. Müller, 1776)													
<i>Lagis koreni</i>		P1107	152367	Malmgren, 1866							1		1				1
<i>Sabellaria spinulosa</i>		P1117	130867	(Leuckart, 1849)													
<i>Ampharete falcata</i>		P1135	129777	Eliason, 1955													

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<i>Ampharete lindstroemi</i>		P1139	129781	Hessle, 1917		1		2		1							
<i>Ampharete octocirrata</i>		P1160	332932	(Sars, 1835)													
<i>Terebellides</i>		P1174	129717	Sars, 1835													
<i>Eupolymnia nebulosa</i>		P1189	131489	(Montagu, 1819)				1									
<i>Lanice conchilega</i>		P1195	131495	(Pallas, 1766)		1					1						1
<i>Phisidia aurea</i>		P1215	131513	Southward, 1956				2		1			1				
<i>Pista bansei</i>		P1219_B	152254	Saphronova, 1988						1							
<i>Polycirrus</i>		P1235	129710	Grube, 1850				2	2	1							
<i>Dialychone</i>		P1264_C	155472	Claparède, 1868									1				
<i>Hydroides norvegica</i>		P1334	131009	Gunnerus, 1768													
<i>Tubificoides amplivasatus</i>		P1489	137570	(Erséus, 1975)													
Enchytraeidae		P1501	2038	d'Udekem, 1855													
HIRUDINEA		P1579	2041	Savigny, 1822								1					
Arthropoda																	
<i>Anoplodactylus petiolatus</i>		Q0044	134723	(Krøyer, 1844)													
<i>Pericolodes longimanus</i>		S0131	102915	(Spence Bate & Westwood, 1868)		1	1						1	1			
<i>Synchelidium maculatum</i>		S0138	102928	Stebbing, 1906	1											1	
<i>Harpinia antennaria</i>		S0254	102960	Meinert, 1890													
<i>Hippomedon denticulatus</i>		S0296	102570	(Spence Bate, 1857)									1				
<i>Lepidepcreum longicorne</i>		S0301	102598	(Spence Bate & Westwood, 1861)											1		
<i>Lysianassa plumosa</i>		S0305	102611	Boeck, 1871													
<i>Tryphosella nanoides</i>		S0343	102764	(Liljeborg, 1865)								1					
<i>Argissa hamatipes</i>		S0360	102064	(Norman, 1869)			2										1
<i>Iphimedia perplexa</i>		S0383	102348	Myers & Costello, in Myers, McGrath & Costello, 1987													
<i>Nototropis falcatus</i>		S0410	102139	(Metzger, 1871)			1			1					1		
<i>Ampelisca brevicornis</i>		S0427	101891	(A. Costa, 1853)													
<i>Ampelisca diadema</i>		S0429	101896	(A. Costa, 1853)	1												
<i>Ampelisca tenuicornis</i>		S0440	101930	Liljeborg, 1856													
<i>Bathyporeia elegans</i>		S0452	103058	Watkin, 1938		2	1		1	1	4	4	1	15	12	3	2
<i>Bathyporeia guilliamsoniana</i>		S0454	103060	(Spence Bate, 1857)			5				2	2	2	3	10	1	5
<i>Bathyporeia tenuipes</i>		S0459	103076	Meinert, 1877										1			
<i>Megaluropus agilis</i>		S0489	102783	Hoek, 1889		1											
<i>Abludomelita obtusata</i>		S0498	102788	(Montagu, 1813)													
Aoridae		S0577	101368	Stebbing, 1899													

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<i>Centraloecetes kroyeranus</i>		S0618	1059646	(Spence Bate, 1857)	1	9	3	39	6	5	1	2	2				
<i>Centraloecetes striatus</i>		S0619	1059649	(Myers & McGrath, 1979)		1	1	12					1				
<i>Pariambus typicus</i>		S0651	101857	(Krøyer, 1845)								1	2	1			1
<i>Gnathia oxyuraea</i>		S0796	118995	(Lilljeborg, 1855)													
<i>Astacilla dilatata</i>		S0951	295579	G. O. Sars, 1883													
<i>Tanaopsis graciloides</i>		S1142	136458	(Lilljeborg, 1864)													
<i>Eudorellopsis deformis</i>		S1210	110536	(Krøyer, 1846)								2			2		
<i>Pseudocuma (Pseudocuma) simile</i>		S1237	110628	G.O. Sars, 1900	1	1		1				1				1	
<i>Diastylis bradyi</i>		S1248	110472	Norman, 1879				1					1	4		3	
<i>Diastylis laevis</i>		S1251	110481	Norman, 1869													
<i>Diastylis rugosa</i>		S1254	110488	Sars, 1865	1			1									
<i>Processa nouveli holthuisi</i>		S1367	108344	Al-Adhub & Williamson, 1975													
<i>Philocheras trispinosus</i>		S1390	107562	(Hailstone <i>in</i> Hailstone & Westwood, 1835)													
<i>Pagurus cuanensis</i>		S1460	107235	Bell, 1845													
<i>Galathea intermedia</i>		S1472	107150	Lilljeborg, 1851													
<i>Ebalia tuberosa</i>		S1508	107301	(Pennant, 1777)		1											
<i>Pinnotheres pisum</i>		S1638	107473	(Linnaeus, 1767)													
Mollusca																	
<i>Chaetoderma nitidulum</i>		W0009	139106	Lovén, 1844													
<i>Ceratia proxima</i>		W0408	140128	(Forbes & Hanley, 1850)													
<i>Aporrhais pespelecani</i>		W0430	138760	(Linnaeus, 1758)													
<i>Erato voluta</i>		W0465	139761	(Montagu, 1803)													
<i>Euspira nitida</i>		W0491	151894	(Donovan, 1803)	1			2	2	2			1		1		1
<i>Epitonium trevelyanum</i>		W0553	139736	(G. Johnston, 1841)													
<i>Eulima bilineata</i>		W0603	139800	Alder, 1848													
<i>Bela nebula</i>		W0801	139217	(Montagu, 1803)				1									
<i>Megastomia conoidea</i>		W0952	224401	(Brocchi, 1814)													
<i>Pyrgiscus crenatus</i>		W0985	836211	(T. Brown, 1827)									1				
<i>Acteon tornatilis</i>		W1006	138691	(Linnaeus, 1758)													
<i>Cylichna cylindracea</i>		W1028	139476	(Pennant, 1777)											1	2	2
<i>Hermania scabra/indistincta</i>		W1045	867492/867493									1					
NUDIBRANCHIA		W1243	1762	Cuvier, 1817													
<i>Antalis entalis</i>		W1519	150534	(Linnaeus, 1758)													
<i>Nucula nitidosa</i>		W1569	140589	Winckworth, 1930			2				2	2	5	5	1		2
<i>Glycymeris glycymeris</i>		W1688	140025	(Linnaeus, 1758)													
Anomiidae		W1805	214	Rafinesque, 1815													

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<i>Myrtea spinifera</i>		W1827	140287	(Montagu, 1803)													
<i>Lucinoma borealis</i>		W1829	140283	(Linnaeus, 1767)											1		
<i>Thyasira flexuosa</i>		W1837	141662	(Montagu, 1803)									1		2		
<i>Kurtiella bidentata</i>		W1906	345281	(Montagu, 1803)													
<i>Goodallia triangularis</i>		W1929	138831	(Montagu, 1803)					1								
<i>Acanthocardia echinata</i>		W1943	138992	(Linnaeus, 1758)													
<i>Spisula elliptica</i>		W1975	140300	(T. Brown, 1827)													
<i>Phaxas pellucidus</i>		W2006	140737	(Pennant, 1777)			1					1		1		2	1
<i>Arcopagia crassa</i>		W2015	141577	(Pennant, 1777)													
<i>Fabulina fabula</i>		W2019	146907	(Gmelin, 1791)							1	6	1	6	2	3	5
<i>Asbjornsenia pygmaea</i>		W2023	879714	(Lovén, 1846)					1								
<i>Gari fervensis</i>		W2051	140870	(Gmelin, 1791)									1		1		
<i>Abra alba</i>		W2059	141433	(W. Wood, 1802)	1											1	
<i>Abra prismatica</i>		W2062	141436	(Montagu, 1808)		2		9	1	3	2	1	1	1	1	2	1
<i>Arctica islandica</i>		W2072	138802	(Linnaeus, 1767)			1		1			1					
<i>Chamelea striatula</i>		W2097_A	141908	(da Costa, 1778)			3		1	1		1	3		1		
<i>Timoclea ovata</i>		W2104	141929	(Pennant, 1777)							2		6				
<i>Mysia undata</i>		W2139	140728	(Pennant, 1777)	1				1				1				
<i>Varicorbula gibba</i>		W2157	378492	(Olivi, 1792)													
<i>Hiatella arctica</i>		W2166	140103	(Linnaeus, 1767)													
<i>Thracia phaseolina</i>		W2231	152378	(Lamarck, 1818)													
<i>Cochlodesma praetenuae</i>		W2239	181373	(Pulteney, 1799)	1			1				1			1		
<i>Lyonsia norvegica</i>		W2247	140291	(Gmelin, 1791)		1											
<i>Pandora pinna</i>		W2252	140675	(Montagu, 1803)													
Phoronida																	
<i>Phoronis</i>		ZA0003	128545	Wright, 1856		1										1	1
Echinodermata																	
<i>Astropecten irregularis</i>		ZB0026	123867	(Pennant, 1777)													
<i>Acrocnida brachiata</i>		ZB0151	236130	(Montagu, 1804)													
<i>Amphiura filiformis</i>		ZB0154	125080	(O.F. Müller, 1776)													
<i>Ophiura albida</i>		ZB0168	124913	Forbes, 1839													
<i>Echinocyamus pusillus</i>		ZB0212	124273	(O.F. Müller, 1776)	5	6	6	35	7	5	3	5	6	1	2		1

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST20FA	MCW-C-ST31FA	MCW-C-ST32FA	MCW-C-ST41FA	MCW-C-ST42FA	MCW-C-ST43FA	MCW-C-ST52FA	MCW-C-ST53FA	MCW-C-ST54FA	MCW-C-ST62FA	MCW-C-ST63FA	MCW-C-ST70FA	MCW-C-ST71FA
<i>Echinocardium cordatum</i>		ZB022 3	124392	(Pennant, 1777)												1	
<i>Echinocardium flavescens</i>		ZB022 4	124394	(O.F. Müller, 1776)													
<i>Leptosynapta bergensis</i>		ZB029 2	124462	(Östergren, 1905)													
<i>Oestergrenia digitata</i>		ZB030 0	152547	(Montagu, 1815)													
Hemichordata																	
ENTEROPNEUSTA		ZC001 2	1820	Gegenbaur, 1870										2		1	
Taxa					20	33	19	32	20	19	18	35	35	25	29	24	24
Abundance					33	72	47	183	43	46	35	72	73	87	59	55	46
The following taxa (highlighted below) are merged in the rationalised dataset above																	
Aoridae	Female	S0577	101368	Stebbing, 1899													
<i>Autonoe longipes</i>		S0583	102021	(Liljeborg, 1852)													
Aoridae		S0577	101368	Stebbing, 1899													
The following taxa were excluded from the analysis																	
Juveniles																	
HEXACORALLIA	Juvenile	D0627	1340	Haeckel, 1896	1					1		1					
SIPUNCULA	Juvenile	N0001	1268	Stephen, 1965							1						
Aphroditidae	Juvenile	P0017	938	Malmgren, 1867													
Polynoidae	Juvenile	P0025	939	Kinberg, 1856													
<i>Sthenelais</i>	Juvenile	P0106	129595	Kinberg, 1856													
<i>Eumida</i>	Juvenile	P0163	129446	Malmgren, 1865													
<i>Syllis</i>	Juvenile	P0358	129680	Lamarck, 1818													
Nephtyidae	Juvenile	P0490	956	Grube, 1850													
Lumbrineridae	Juvenile	P0569	967	Schmarda, 1861		2		2									
Pectinariidae	Juvenile	P1100	980	Quatrefages, 1866													
Terebellidae	Juvenile	P1179	982	Johnston, 1846													
<i>Hippolyte</i>	Juvenile	S1346	106987	Leach, 1814													
Callianassidae	Juvenile	S1413	106800	Dana, 1852													
<i>Liocarcinus</i>	Juvenile	S1577	106925	Stimpson, 1871				1									
Philinidae	Juvenile	W1035	161	Gray, 1850 (1815)													
BIVALVIA	Juvenile	W1560	105	Linnaeus, 1758													
<i>Nucula</i>	Juvenile	W1565	138262	Lamarck, 1799			1				1					1	1
<i>Mytilus</i>	Juvenile	W1693	138228	Linnaeus, 1758													
Thyasiridae	Juvenile	W1833	219	Dall, 1900 (1895)											1		
Mactrinae	Juvenile	W1968	152831	Lamarck, 1809	1				1								1

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST20FA	MCW-C-ST31FA	MCW-C-ST32FA	MCW-C-ST41FA	MCW-C-ST42FA	MCW-C-ST43FA	MCW-C-ST52FA	MCW-C-ST53FA	MCW-C-ST54FA	MCW-C-ST62FA	MCW-C-ST63FA	MCW-C-ST70FA	MCW-C-ST71FA
<i>Spisula</i>	Juvenile	W1973	138159	J. E. Gray, 1837					2								
<i>Gari</i>	Juvenile	W2044	138388	Schumacher, 1817													1
<i>Abra</i>	Juvenile	W2058	138474	Lamarck, 1818		1		1				1					1
<i>Arctica islandica</i>	Juvenile	W2072	138802	(Linnaeus, 1767)				1			2	1	2				
Veneridae	Juvenile	W2086	243	Rafinesque, 1815	2						1						1
<i>Dosinia</i>	Juvenile	W2126	138636	Scopoli, 1777	1	2	1	1	1	1			3		5		
THRACIOIDEA	Juvenile	W2225	382318	Stoliczka, 1870 (1839)	2	1	2	3	4	1			2	1			
OPHIUROIDEA	Juvenile	ZB0105	123084	Gray, 1840	6	6	2	4				3	3	2	1	3	
Amphiuridae	Juvenile	ZB0148	123206	Ljungman, 1867		3	4	1	1	3	3	5	1	1			3
Ophiuridae	Juvenile	ZB0165	123200	Müller & Troschel, 1840													
SPATANGOIDA	Juvenile	ZB0213	123106	L. Agassiz, 1840	4	5	4	4	2	6	1	7		8	2		2
<i>Echinocardium</i>	Juvenile	ZB0222	123426	Gray, 1825	1			1						1			
DENDROCHIROTIDA	Juvenile	ZB0249	123111	Grube, 1840													
ASCIDIACEA	Juvenile	ZD0002	1839	Blainville, 1824				7	24	2		1	5				
Ammodytidae	Juvenile	ZG0441	125516	Bonaparte, 1835					1	7							
Damaged																	
Polynoidae	Damaged	P0025	939	Kinberg, 1856													
Phyllodocidae	Damaged	P0114	931	Örsted, 1843													
<i>Eumida</i>	Damaged	P0163	129446	Malmgren, 1865													
<i>Orbinia</i>	Damaged	P0661	129420	Quatrefages, 1866													
Maldanidae	Damaged	P0938	923	Malmgren, 1867													
Serpulidae	Damaged	P1324	988	Rafinesque, 1815													
<i>Diastylis</i>	Damaged	S1247	110398	Say, 1818													
Ammodytidae	Damaged	ZG0441	125516	Bonaparte, 1835					1								
Epifauna																	
PORIFERA		C0001	558	Grant, 1836													
ANTHOATHECATA		D0140	13551	Cornelius, 1992								P					
Tubulariidae		D0158	1603	Goldfuss, 1818		P											
FILIFERA		D0216	16352	Kühn, 1913													
<i>Eudendrium</i>		D0218	117093	Ehrenberg, 1834													
LEPTOTHECATA		D0295	13552	Cornelius, 1992				P	P	P							
<i>Lovenella clausa</i>		D0336	117736	(Lovén, 1836)	P	P	P				P	P	P	P	P	P	P

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST20FA	MCW-C-ST31FA	MCW-C-ST32FA	MCW-C-ST41FA	MCW-C-ST42FA	MCW-C-ST43FA	MCW-C-ST52FA	MCW-C-ST53FA	MCW-C-ST54FA	MCW-C-ST62FA	MCW-C-ST63FA	MCW-C-ST70FA	MCW-C-ST71FA
Campanulariidae		D0491	1606	Johnston, 1836													
SESSILIA		R0015_A	106033	Lamarck, 1818													
<i>Verruca stroemia</i>		R0041	106257	(O.F. Müller, 1776)													
Crisiidae		Y0004	110806	Johnston, 1838													P
<i>Vesicularia spinosa</i>		Y0131	111669	(Linnaeus, 1758)					P								
<i>Amathia lendigera</i>		Y0135	111659	(Linnaeus, 1758)													P
CHEILOSTOMATIDA		Y0149	110722	Busk, 1852													
<i>Aetea</i>		Y0153	110819	Lamouroux, 1812													
<i>Eucratea loricata</i>		Y0165	111361	(Linnaeus, 1758)													
<i>Electra pilosa</i>		Y0178	111355	(Linnaeus, 1767)			P										P
<i>Flustra foliacea</i>		Y0187	111367	(Linnaeus, 1758)			P										
Candidae		Y0265	110734	d'Orbigny, 1851													
<i>Celleporella hyalina</i>		Y0337	111397	(Linnaeus, 1767)													
Algae																	
<i>Polysiphonia stricta</i>	?	ZM0679	144672	(Mertens ex Dillwyn) Greville, 1824													
<i>Hypoglossum hypoglossoides</i>		ZM610	144756	(Stackhouse) Collins & Hervey, 1917													
Meiofauna																	
NEMATODA		HD0001	799														
COPEPODA		R0142	1080	Milne Edwards, 1840											1		
Fish																	
<i>Ammodytes marinus</i>		ZG0443	126751	Raitt, 1934					1								
Taxa					9	9	9	12	12	8	6	10	7	6	6	3	11
Abundance					18	20	14	26	38	21	8	20	16	13	10	4	10

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AFA	MCW-D-ST101FA	MCW-D-ST103AFA
Cnidaria																
<i>Virgularia mirabilis</i>		D0618	128539	(Müller, 1776)												
ACTINIARIA		D0662	1360	Hertwig, 1882												
<i>Halcampa</i>		D0757	100740	Gosse, 1858				1								
Edwardsiidae		D0759	100665	Andres, 1881	2					1			2		1	
Platyhelminthes																
PLATYHELMINTHES		F0001	793	Minot, 1876												
Nemertea																
NEMERTEA		G0001	152391				1			1	2			2	5	
<i>Tubulanus polymorphus</i>		G0034	122637	Renier, 1804		2	2		2	4						
<i>Cerebratulus</i>		G0039	122348	Renier, 1804									2			
Annelida																
<i>Phascolion (Phascolion) strombus strombus</i>		N0034	410749	(Montagu, 1804)				1							5	
<i>Pisione remota</i>		P0015	130707	(Southern, 1914)										12	57	
<i>Pholoe inornata</i>		P0092	130601	Johnston, 1839												
<i>Pholoe baltica</i>		P0095	130599	Örsted, 1843												
<i>Sigalion mathildae</i>		P0104	131072	Audouin & Milne Edwards, 1832		3	1									
<i>Sthenelais limicola</i>		P0109	131077	(Ehlers, 1864)	4	1	2	4	2	1		5				1
<i>Eteone longa</i>	Aggregate	P0118	130616	(Fabricius, 1780)										1		
<i>Hesionura elongata</i>		P0122	130649	(Southern, 1914)										1	2	
<i>Phyllodoce longipes</i>		P0143	130673	Kinberg, 1866												
<i>Phyllodoce rosea</i>		P0146	334514	(McIntosh, 1877)												
<i>Eulalia mustela</i>		P0155	130631	Pleijel, 1987										2	2	
<i>Eulalia viridis</i>		P0161	130639	(Linnaeus, 1767)												
<i>Eumida bahusiensis</i>		P0164	130641	Bergstrom, 1914												
<i>Glycera alba</i>		P0256	130116	(O.F. Müller, 1776)												
<i>Glycera lapidum</i>		P0260	130123	Quatrefages, 1866										13	12	
<i>Glycera oxycephala</i>		P0262	130126	Ehlers, 1887									1			
<i>Glycera unicornis</i>		P0263	130131	Lamarck, 1818										1		
<i>Glycinde nordmanni</i>		P0268	130136	(Malmgren, 1866)										1		
<i>Goniada maculata</i>		P0271	130140	Örsted, 1843												
<i>Goniadella gracilis</i>		P0276	130145	(Verrill, 1873)										4		
<i>Psamathe fusca</i>		P0305	152249	Johnston, 1836										1	1	
<i>Oxydromus flexuosus</i>		P0313	710680	(Delle Chiaje, 1827)												
<i>Syllis garciai</i>		P0351	131431	(Campoy, 1982)										3		

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100FA	MCW-D-ST101FA	MCW-D-ST103FA
<i>Syllis licheri</i>		P0358_B	238263	Ravara, San Martín & Moreira, 2004										9	7	
<i>Syllis armillaris</i>	Aggregate	P0365	131415	(O.F. Müller, 1776)												
<i>Streptosyllis websteri</i>		P0405	131402	Southern, 1914												
<i>Parexogone hebes</i>		P0421	757970	(Webster & Benedict, 1884)				1						1		
<i>Exogone naidina</i>		P0422	327985	Örsted, 1845				1		1						
<i>Sphaerosyllis bulbosa</i>		P0425	131379	Southern, 1914										1	4	
<i>Nereis zonata</i>		P0478	130407	Malmgren, 1867											2	
<i>Aglaophamus agilis</i>		P0493	130343	(Langerhans, 1880)							1			3	1	
<i>Nephtys assimilis</i>		P0495	130353	Örsted, 1843												
<i>Nephtys cirrosa</i>		P0498	130357	Ehlers, 1868	2			2	2		2	1	3			3
<i>Nephtys hombergii</i>		P0499	130359	Savigny in Lamarck, 1818												
<i>Aponuphis bilineata</i>		P0539	130452	(Baird, 1870)										1		
<i>Lumbrineris cingulata</i>		P0572_A	130240	Ehlers, 1897	17	4	3	5	1	4		5	1			8
<i>Ophryotrocha</i>		P0613	129266	Claparède & Mecznikow, 1869												
<i>Protodorvillea kefersteini</i>		P0638	130041	(McIntosh, 1869)										11	23	
<i>Schistomeringos neglecta</i>		P0642	130044	(Fauvel, 1923)											3	
<i>Orbinia armandi</i>		P0663	130518	(McIntosh, 1910)							1					
<i>Orbinia sertulata</i>		P0665	130523	(Savigny, 1822)												
<i>Scoloplos armiger</i>		P0672	130537	(Müller, 1776)			1		5	3						
<i>Aricidea (Aricidea) minuta</i>		P0677	730747	Southward, 1956						1						
<i>Aricidea (Acmira) catherinae</i>		P0684	333034	Laubier, 1967		2	1	1		1						
<i>Aricidea (Acmira) cerrutii</i>		P0685	525497	Laubier, 1966										1		
<i>Aricidea (Acmira) laubieri</i>		P0686	326587	Hartley, 1981												
<i>Apistobranthus tullbergi</i>		P0712	129851	(Théel, 1879)		1										
<i>Poecilochaetus serpens</i>		P0718	130711	Allen, 1904				1	1							
<i>Aonides paucibranchiata</i>		P0723	131107	Southern, 1914		5	1	1		2				15	5	
<i>Laonice irinae</i>		P0731_A	1518242	Sikorski, Radashevsky & Nygren in Sikorski et al, 2021											1	
<i>Prionospio cirrifera</i>		P0747	131153	Wirén, 1883												
<i>Dipolydora caulleryi</i>		P0751	131116	(Mesnil, 1897)												
<i>Dipolydora saintjosephi</i>		P0761	131123	(Eliason, 1920)												
<i>Prionospio fallax</i>		P0765	131157	Söderström, 1920		1										
<i>Aurospio banyulensis</i>		P0766	146532	(Laubier, 1966)												
<i>Pseudopolydora pulchra</i>		P0774	131169	(Carazzi, 1893)												
<i>Scolecopsis korsuni</i>		P0777_A	131174	Sikorski, 1994												

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<i>Scolelepis bonnieri</i>		P0779	131171	(Mesnil, 1896)												
<i>Spio symphyta</i>		P0787_C	596189	Meißner, Bick & Bastrop, 2011		1		2						2		
<i>Spio decorata</i>		P0789	152314	Bobretzky, 1870												
<i>Spiophanes bombyx</i>	Aggregate	P0794	131187	(Claparède, 1870)	3	6	3	14	1	2	2	1	2			
<i>Spiophanes kroyeri</i>	Aggregate	P0796	131188	Grube, 1860												
<i>Magelona johnstoni</i>		P0803_A	130269	Fiege, Licher & Mackie, 2000		1										
<i>Magelona alleni</i>		P0804	130266	Wilson, 1958												
<i>Magelona filiformis</i>		P0805	130268	Wilson, 1959		2	4	2	3							
<i>Magelona mirabilis</i>		P0807	130271	(Johnston, 1865)									1			
<i>Chaetopterus</i>		P0811	129229	Cuvier, 1830												
<i>Spiochaetopterus</i>		P0818	129233	M Sars, 1856												
<i>Aphelochaeta</i>	Species A	P0823	129240	Blake, 1991												
<i>Aphelochaeta</i>		P0823	129240	Blake, 1991												
<i>Caulleriella alata</i>		P0829	129943	(Southern, 1914)										1		
<i>Chaetozone zetlandica</i>		P0831	336485	McIntosh, 1911							1					
<i>Chaetozone christiei</i>		P0832_A	152217	Chambers, 2000					3		1					
<i>Chaetozone setosa</i>		P0834	129955	Malmgren, 1867		2										
<i>Dodecaceria</i>		P0840	129246	Ørsted, 1843												
<i>Tharyx killariensis</i>		P0846	152269	(Southern, 1914)												
<i>Diplocirrus glaucus</i>		P0878	130100	(Malmgren, 1867)												
<i>Mediomastus fragilis</i>		P0919	129892	Rasmussen, 1973										3		
<i>Notomastus</i>		P0920	129220	M. Sars, 1851							3			41	5	
<i>Praxillura longissima</i>		P0944	130327	Arwidsson, 1906												
<i>Euclymene</i>	Species A	P0960	129347	Verrill, 1900												
<i>Euclymene oerstedii</i>		P0964	130294	(Claparède, 1863)												
<i>Ophelia borealis</i>		P0999	130491	Quatrefages, 1866								1				1
<i>Travisia forbesii</i>		P1007	130512	Johnston, 1840				1								
<i>Ophelina acuminata</i>		P1014	130500	Ørsted, 1843												
<i>Scalibregma inflatum</i>		P1027	130980	Rathke, 1843												
<i>Scalibregma hanseni</i>		P1027_A	746615	Bakken, Oug & Kongsrud, 2014												
Polygordiidae		P1061	993	Czerniavsky, 1881										1	21	
<i>Galathowenia oculata</i>		P1093	146950	(Zachs, 1923)		7	6	1	1	3						
<i>Myriochele danielsseni</i>		P1095	130540	Hansen, 1878		4										
<i>Owenia</i>		P1097	129427	Delle Chiaje, 1844												

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<i>Amphictene auricoma</i>		P1102	152448	(O.F. Müller, 1776)												
<i>Lagis koreni</i>		P1107	152367	Malmgren, 1866												
<i>Sabellaria spinulosa</i>		P1117	130867	(Leuckart, 1849)												
<i>Ampharete falcata</i>		P1135	129777	Eliason, 1955												
<i>Ampharete lindstroemi</i>		P1139	129781	Hessle, 1917						1						
<i>Ampharete octocirrata</i>		P1160	332932	(Sars, 1835)												
<i>Terebellides</i>		P1174	129717	Sars, 1835						1						
<i>Eupolymnia nebulosa</i>		P1189	131489	(Montagu, 1819)												
<i>Lanice conchilega</i>		P1195	131495	(Pallas, 1766)			1	3								
<i>Phisidia aurea</i>		P1215	131513	Southward, 1956												
<i>Pista bansei</i>		P1219_B	152254	Saphronova, 1988												
<i>Polycirrus</i>		P1235	129710	Grube, 1850										1		
<i>Dialychone</i>		P1264_C	155472	Claparède, 1868												
<i>Hydroides norvegica</i>		P1334	131009	Gunnerus, 1768												
<i>Tubificoides amplivasatus</i>		P1489	137570	(Erséus, 1975)												
Enchytraeidae		P1501	2038	d'Udekem, 1855										2		
HIRUDINEA		P1579	2041	Savigny, 1822												
Arthropoda																
<i>Anoplodactylus petiolatus</i>		Q0044	134723	(Krøyer, 1844)												
<i>Periculodes longimanus</i>		S0131	102915	(Spence Bate & Westwood, 1868)			1			1						
<i>Synchelidium maculatum</i>		S0138	102928	Stebbing, 1906				2		1						
<i>Harpinia antennaria</i>		S0254	102960	Meinert, 1890			1									
<i>Hippomedon denticulatus</i>		S0296	102570	(Spence Bate, 1857)												
<i>Lepidepcreum longicorne</i>		S0301	102598	(Spence Bate & Westwood, 1861)				1								
<i>Lysianassa plumosa</i>		S0305	102611	Boeck, 1871			1									
<i>Tryphosella nanoides</i>		S0343	102764	(Liljeborg, 1865)												
<i>Argissa hamatipes</i>		S0360	102064	(Norman, 1869)												
<i>Iphimedia perplexa</i>		S0383	102348	Myers & Costello, in Myers, McGrath & Costello, 1987							1					
<i>Nototropis falcatus</i>		S0410	102139	(Metzger, 1871)						1						
<i>Ampelisca brevicornis</i>		S0427	101891	(A. Costa, 1853)												
<i>Ampelisca diadema</i>		S0429	101896	(A. Costa, 1853)												
<i>Ampelisca tenuicornis</i>		S0440	101930	Liljeborg, 1856										1	1	
<i>Bathyporeia elegans</i>		S0452	103058	Watkin, 1938	1	4	5		2	3			1	1		
<i>Bathyporeia guilliamsoniana</i>		S0454	103060	(Spence Bate, 1857)		5	5	1	5	8						

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AF A	MCW-D-ST101FA	MCW-D-ST103AF A
<i>Bathyporeia tenuipes</i>		S0459	103076	Meinert, 1877												
<i>Megaluropus agilis</i>		S0489	102783	Hoek, 1889												
<i>Abludomelita obtusata</i>		S0498	102788	(Montagu, 1813)			3				1					
Aoridae		S0577	101368	Stebbing, 1899		1										
<i>Centraloecetes kroyeranus</i>		S0618	1059646	(Spence Bate, 1857)		2		3	10		1	6				1
<i>Centraloecetes striatus</i>		S0619	1059649	(Myers & McGrath, 1979)		1	1	1		4		2				
<i>Pariambus typicus</i>		S0651	101857	(Krøyer, 1845)					2		1					
<i>Gnathia oxyuraea</i>		S0796	118995	(Lilljeborg, 1855)												
<i>Astacilla dilatata</i>		S0951	295579	G. O. Sars, 1883												
<i>Tanaopsis graciloides</i>		S1142	136458	(Lilljeborg, 1864)												
<i>Eudorellopsis deformis</i>		S1210	110536	(Krøyer, 1846)		1										
<i>Pseudocuma (Pseudocuma) simile</i>		S1237	110628	G.O. Sars, 1900												
<i>Diastylis bradyi</i>		S1248	110472	Norman, 1879	1	1		2			1					
<i>Diastylis laevis</i>		S1251	110481	Norman, 1869												
<i>Diastylis rugosa</i>		S1254	110488	Sars, 1865				3								
<i>Processa nouveli holthuisi</i>		S1367	108344	Al-Adhub & Williamson, 1975												
<i>Philocheras trispinosus</i>		S1390	107562	(Hailstone <i>in</i> Hailstone & Westwood, 1835)												
<i>Pagurus cuanensis</i>		S1460	107235	Bell, 1845												
<i>Galathea intermedia</i>		S1472	107150	Lilljeborg, 1851												
<i>Ebalia tuberosa</i>		S1508	107301	(Pennant, 1777)												
<i>Pinnotheres pisum</i>		S1638	107473	(Linnaeus, 1767)												
Mollusca																
<i>Chaetoderma nitidulum</i>		W0009	139106	Lovén, 1844												
<i>Ceratia proxima</i>		W0408	140128	(Forbes & Hanley, 1850)												
<i>Aporrhais pespelecani</i>		W0430	138760	(Linnaeus, 1758)												
<i>Erato voluta</i>		W0465	139761	(Montagu, 1803)												
<i>Euspira nitida</i>		W0491	151894	(Donovan, 1803)							2					1
<i>Epitonium trevelyanum</i>		W0553	139736	(G. Johnston, 1841)		1										
<i>Eulima bilineata</i>		W0603	139800	Alder, 1848											1	
<i>Bela nebula</i>		W0801	139217	(Montagu, 1803)												
<i>Megastomia conoidea</i>		W0952	224401	(Brocchi, 1814)												
<i>Pyrgiscus crenatus</i>		W0985	836211	(T. Brown, 1827)				1			1					
<i>Acteon tornatilis</i>		W1006	138691	(Linnaeus, 1758)												
<i>Cylichna cylindracea</i>		W1028	139476	(Pennant, 1777)					1	3						
<i>Hermania scabra/indistincta</i>		W1045	867492/867493													

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AF A	MCW-D-ST101FA	MCW-D-ST103AF A
NUDIBRANCHIA		W1243	1762	Cuvier, 1817												
<i>Antalis entalis</i>		W1519	150534	(Linnaeus, 1758)		2										
<i>Nucula nitidosa</i>		W1569	140589	Winckworth, 1930		2	4		1	1						1
<i>Glycymeris glycymeris</i>		W1688	140025	(Linnaeus, 1758)											1	
Anomiidae		W1805	214	Rafinesque, 1815												
<i>Myrtea spinifera</i>		W1827	140287	(Montagu, 1803)												
<i>Lucinoma borealis</i>		W1829	140283	(Linnaeus, 1767)						1						
<i>Thyasira flexuosa</i>		W1837	141662	(Montagu, 1803)												
<i>Kurtiella bidentata</i>		W1906	345281	(Montagu, 1803)		1										
<i>Goodallia triangularis</i>		W1929	138831	(Montagu, 1803)						1	7				5	
<i>Acanthocardia echinata</i>		W1943	138992	(Linnaeus, 1758)												
<i>Spisula elliptica</i>		W1975	140300	(T. Brown, 1827)							3			1		
<i>Phaxas pellucidus</i>		W2006	140737	(Pennant, 1777)					2	1						
<i>Arcopagia crassa</i>		W2015	141577	(Pennant, 1777)										1		
<i>Fabulina fabula</i>		W2019	146907	(Gmelin, 1791)		1	6		1	2						
<i>Asbjornsenia pygmaea</i>		W2023	879714	(Lovén, 1846)							4			1		
<i>Gari fervensis</i>		W2051	140870	(Gmelin, 1791)				2								
<i>Abra alba</i>		W2059	141433	(W. Wood, 1802)	1				1	1						
<i>Abra prismatica</i>		W2062	141436	(Montagu, 1808)		1	2	4	1	3	4		4			
<i>Arctica islandica</i>		W2072	138802	(Linnaeus, 1767)	1			1		1						
<i>Chamelea striatula</i>		W2097_A	141908	(da Costa, 1778)		2		1	1	2	1					
<i>Timoclea ovata</i>		W2104	141929	(Pennant, 1777)		5	7	4	2	4	1	4	1	1	2	
<i>Mysia undata</i>		W2139	140728	(Pennant, 1777)												
<i>Varicorbula gibba</i>		W2157	378492	(Olivi, 1792)												
<i>Hiatella arctica</i>		W2166	140103	(Linnaeus, 1767)												
<i>Thracia phaseolina</i>		W2231	152378	(Lamarck, 1818)						1						
<i>Cochlodesma praetenuae</i>		W2239	181373	(Pulteney, 1799)												
<i>Lyonsia norvegica</i>		W2247	140291	(Gmelin, 1791)												
<i>Pandora pinna</i>		W2252	140675	(Montagu, 1803)						1						
Phoronida																
<i>Phoronis</i>		ZA0003	128545	Wright, 1856		3	6	2	2			1				
Echinodermata																
<i>Astropecten irregularis</i>		ZB0026	123867	(Pennant, 1777)												
<i>Acrocnida brachiata</i>		ZB0151	236130	(Montagu, 1804)		1										

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AF A	MCW-D-ST101FA	MCW-D-ST103AF A
<i>Amphiura filiformis</i>		ZB0154	125080	(O.F. Müller, 1776)												
<i>Ophiura albida</i>		ZB0168	124913	Forbes, 1839												
<i>Echinocyamus pusillus</i>		ZB0212	124273	(O.F. Müller, 1776)		4	3	4			8	1	3	1	1	
<i>Echinocardium cordatum</i>		ZB0223	124392	(Pennant, 1777)												
<i>Echinocardium flavescens</i>		ZB0224	124394	(O.F. Müller, 1776)												
<i>Leptosynapta bergensis</i>		ZB0292	124462	(Östergren, 1905)												
<i>Oestergrenia digitata</i>		ZB0300	152547	(Montagu, 1815)												
Hemichordata																
ENTEROPNEUSTA		ZC0012	1820	Gegenbaur, 1870		2										
Taxa					9	34	25	31	21	34	17	14	13	33	24	7
Abundance					32	82	71	73	40	74	46	26	29	141	168	16
Aoridae	Female	S0577	101368	Stebbing, 1899		1										
<i>Autonoe longipes</i>		S0583	102021	(Liljeborg, 1852)												
Aoridae		S0577	101368	Stebbing, 1899		1										
Juveniles																
HEXACORALLIA	Juvenile	D0627	1340	Haeckel, 1896				1			9	5	1	1		1
SIPUNCULA	Juvenile	N0001	1268	Stephen, 1965											1	
Aphroditidae	Juvenile	P0017	938	Malmgren, 1867								1				
Polynoidae	Juvenile	P0025	939	Kinberg, 1856										1	1	
<i>Sthenelais</i>	Juvenile	P0106	129595	Kinberg, 1856												
<i>Eumida</i>	Juvenile	P0163	129446	Malmgren, 1865												
<i>Syllis</i>	Juvenile	P0358	129680	Lamarck, 1818										3		
Nephtyidae	Juvenile	P0490	956	Grube, 1850							1					
Lumbrineridae	Juvenile	P0569	967	Schmarda, 1861												
Pectinariidae	Juvenile	P1100	980	Quatrefages, 1866												
Terebellidae	Juvenile	P1179	982	Johnston, 1846												
<i>Hippolyte</i>	Juvenile	S1346	106987	Leach, 1814												
Callianassidae	Juvenile	S1413	106800	Dana, 1852												
<i>Liocarcinus</i>	Juvenile	S1577	106925	Stimpson, 1871												
Philinidae	Juvenile	W1035	161	Gray, 1850 (1815)												
BIVALVIA	Juvenile	W1560	105	Linnaeus, 1758												
<i>Nucula</i>	Juvenile	W1565	138262	Lamarck, 1799	1											

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AF A	MCW-D-ST101FA	MCW-D-ST103AF A
<i>Mytilus</i>	Juvenile	W1693	138228	Linnaeus, 1758												
Thyasiridae	Juvenile	W1833	219	Dall, 1900 (1895)				1								
Macrinae	Juvenile	W1968	152831	Lamarck, 1809							2		1		7	
<i>Spisula</i>	Juvenile	W1973	138159	J. E. Gray, 1837						1	15	2	1	1	10	3
<i>Gari</i>	Juvenile	W2044	138388	Schumacher, 1817											1	
<i>Abra</i>	Juvenile	W2058	138474	Lamarck, 1818		1	1									
<i>Arctica islandica</i>	Juvenile	W2072	138802	(Linnaeus, 1767)					1			2				
Veneridae	Juvenile	W2086	243	Rafinesque, 1815							1	1			1	
<i>Dosinia</i>	Juvenile	W2126	138636	Scopoli, 1777		9	1	4	3	8	1	2	1			
THRACIOIDEA	Juvenile	W2225	382318	Stoliczka, 1870 (1839)		1	1						1		1	
OPHIUROIDEA	Juvenile	ZB0105	123084	Gray, 1840	1		2	2		1						
Amphiuridae	Juvenile	ZB0148	123206	Ljungman, 1867	4	1	5	2	4				1			
Ophiuridae	Juvenile	ZB0165	123200	Müller & Troschel, 1840												
SPATANGOIDA	Juvenile	ZB0213	123106	L. Agassiz, 1840	4	2	4	4	7	2		1				
<i>Echinocardium</i>	Juvenile	ZB0222	123426	Gray, 1825												
DENDROCHIROTIDA	Juvenile	ZB0249	123111	Grube, 1840										1		
ASCIDIACEA	Juvenile	ZD0002	1839	Blainville, 1824		24	29	37	13	76	16	43	3	3	16	3
Ammodytidae	Juvenile	ZG0441	125516	Bonaparte, 1835							5		5		3	
Damaged																
Polynoidae	Damaged	P0025	939	Kinberg, 1856												
Phyllodocidae	Damaged	P0114	931	Örsted, 1843												
<i>Eumida</i>	Damaged	P0163	129446	Malmgren, 1865											1	
<i>Orbinia</i>	Damaged	P0661	129420	Quatrefages, 1866							1					
Maldanidae	Damaged	P0938	923	Malmgren, 1867												
Serpulidae	Damaged	P1324	988	Rafinesque, 1815												
<i>Diastylis</i>	Damaged	S1247	110398	Say, 1818												
Ammodytidae	Damaged	ZG0441	125516	Bonaparte, 1835												
Epifauna																
PORIFERA		C0001	558	Grant, 1836		P										
ANTHOATHECATA		D0140	13551	Cornelius, 1992		P										
Tubulariidae		D0158	1603	Goldfuss, 1818												

Taxon	Qualifier	SDC	AlphaID	Authority	MCW-C-ST79FA	MCW-D-ST64FA	MCW-D-ST72AFA	MCW-D-ST73FA	MCW-D-ST80FA	MCW-D-ST81FA	MCW-D-ST82FA	MCW-D-ST88AFA	MCW-D-ST89AFA	MCW-D-ST100AFA	MCW-D-ST101FA	MCW-D-ST103AFA
FILIFERA		D0216	16352	Kühn, 1913												
<i>Eudendrium</i>		D0218	117093	Ehrenberg, 1834						P						
LEPTOTHECATA		D0295	13552	Cornelius, 1992			P		P			P				
<i>Lovenella clausa</i>		D0336	117736	(Lovén, 1836)	P	P		P		P	P					
Campanulariidae		D0491	1606	Johnston, 1836												
SESSILIA		R0015_A	106033	Lamarck, 1818		P										
<i>Verruca stroemia</i>		R0041	106257	(O.F. Müller, 1776)											P	
Crisiidae		Y0004	110806	Johnston, 1838								P			P	P
<i>Vesicularia spinosa</i>		Y0131	111669	(Linnaeus, 1758)												
<i>Amathia lendigera</i>		Y0135	111659	(Linnaeus, 1758)			P	P								
CHEILOSTOMATIDA		Y0149	110722	Busk, 1852						P						
<i>Aetea</i>		Y0153	110819	Lamouroux, 1812			P								P	
<i>Eucratea loricata</i>		Y0165	111361	(Linnaeus, 1758)									P			
<i>Electra pilosa</i>		Y0178	111355	(Linnaeus, 1767)											P	P
<i>Flustra foliacea</i>		Y0187	111367	(Linnaeus, 1758)										P		
Candidae		Y0265	110734	d'Orbigny, 1851											P	
<i>Celleporella hyalina</i>		Y0337	111397	(Linnaeus, 1767)												
Algae																
<i>Polysiphonia stricta</i>	?	ZM0679	144672	(Mertens ex Dillwyn) Greville, 1824												
<i>Hypoglossum hypoglossoides</i>		ZM610	144756	(Stackhouse) Collins & Hervey, 1917												
Meiofauna																
NEMATODA		HD0001	799											26	10	
COPEPODA		R0142	1080	Milne Edwards, 1840												
Fish																
<i>Ammodytes marinus</i>		ZG0443	126751	Raitt, 1934											1	
Taxa					5	10	10	9	6	8	10	10	9	8	17	5
Abundance					10	38	43	51	28	88	51	57	14	36	53	7

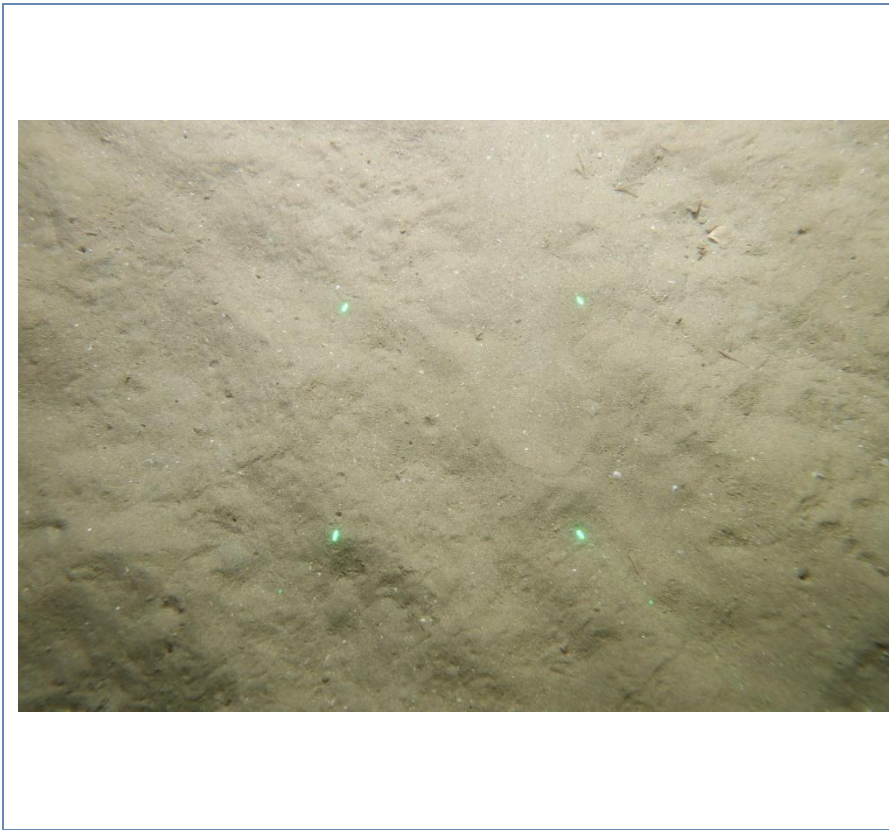
F.2 Macrofauna Biomass

Phylum		Cnidaria	Annelida	Arthropoda	Mollusca	Echinodermata	Others	Chordata	Total
Biomass (dry weight [g] per sample)	MCW-A-ST01	0.0103	0.1581	0.001	2.7579	0.2247	0.0116	-	0.2805225
	MCW-A-ST02	0.0259	0.2843	0.0356	0.1754	0.7049	0.0013	-	0.1275935
	MCW-A-ST03	-	0.1438	0.0207	0.8106	0.3289	0.0444	-	0.1290415
	MCW-A-ST07A	0.0052	0.4659	0.0852	0.453	2.187	0.0002	-	0.3056865
	MCW-A-ST08A	0.089	0.0756	0.01	0.0311	0.1558	0.0056	-	0.0437385
	MCW-A-ST44A	0.0101	0.3493	0.0032	0.1177	0.1373	0.0009	-	0.077555
	MCW-B-ST09A	-	0.6854	0.0254	5.2549	6.1111	0.07	-	1.0583565
	MCW-B-ST10	0.0001	0.0909	0.009	12.9473	0.0939	0.0363	-	1.129789
	MCW-B-ST17A	0.0007	0.1149	0.0062	0.9688	0.9838	0.0017	-	0.1806285
	MCW-B-ST18A	-	0.141	0.0322	1.1342	0.9948	0.0022	-	0.205432
	MCW-B-ST19A	-	0.1853	0.0034	0.0323	0.1973	0.0027	-	0.0484345
	MCW-B-ST29A	-	0.0807	0.0121	0.1641	0.2852	0.00147	-	0.05222335
	MCW-B-ST30A	0.0001	0.1729	0.0621	0.1558	0.9658	0.0022	-	0.1316355
	MCW-C-ST20	0.0001	0.0433	0.0013	0.0515	0.1585	0.0039	-	0.0246815
	MCW-C-ST31	-	0.2099	0.0221	0.0556	0.0611	0.1054	-	0.063458
	MCW-C-ST32	0.005	0.1031	0.0066	0.0577	0.0247	0.0026	-	0.025524
	MCW-C-ST41	0.0361	0.3031	0.0401	0.4532	0.1747	0.0086	-	0.1154295
	MCW-C-ST42	0.0032	0.8606	0.0012	0.0842	0.0576	-	3.2798	0.145924
	MCW-C-ST43	0.0001	0.1188	0.0008	0.2627	0.603	0.0022	7.025	0.08952
	MCW-C-ST52	0.0206	0.0915	0.0048	0.0669	0.032	0.0001	-	0.0267175
	MCW-C-ST53	0.0005	0.2429	0.0049	70.0003	0.039	0.0038	-	5.992564
	MCW-C-ST54	0.0001	0.0656	0.0066	0.2107	0.0089	0.1723	-	0.0569965
	MCW-C-ST62	0.0138	0.3361	0.0187	0.5877	0.0691	0.046	-	0.1210545
	MCW-C-ST63	0.0054	0.0415	0.0177	0.1493	0.0021	0.002	-	0.0244205
	MCW-C-ST70	0.0019	0.0699	0.0047	0.1122	28.05	0.0282	-	2.2700945
	MCW-C-ST71	0.001	0.1935	0.0042	0.2241	0.0033	0.0092	-	0.051831
	MCW-C-ST79	0.002	0.3453	0.0011	7.07	0.0151	-	-	0.656237
	MCW-D-ST64	-	0.0765	0.0071	0.6926	0.0901	0.0353	-	0.0850055
	MCW-D-ST72A	-	0.0512	0.0233	0.3974	0.0194	0.0086	-	0.0498425
	MCW-D-ST73	0.0179	0.1573	0.0129	0.3154	0.0283	0.0022	-	0.0594725
	MCW-D-ST80	-	0.0787	0.0084	0.128	0.0166	0.0035	-	0.026839
	MCW-D-ST81	0.0001	0.0493	0.0132	0.2111	0.0021	0.006	-	0.0296685
	MCW-D-ST82	0.0001	0.054	0.0019	0.5417	0.0927	0.0001	2.6059	0.4662035
	MCW-D-ST88A	0.0001	0.0748	0.0003	0.048	0.0372	0.0013	-	0.0189345
MCW-D-ST89A	0.0011	0.0486	0.0007	0.2747	0.0203	0.3644	3.1038	0.5704055	
MCW-D-ST100A	0.0001	0.7304	0.0008	0.1788	0.0148	0.0012	-	0.1299755	
MCW-D-ST101	0.0001	0.7478	0.0001	0.0822	0.0113	0.0025	6.45	1.1239755	
MCW-D-ST103A	0.0001	0.0882	0.0001	0.0194	-	-	-	0.015358	

Appendix G

Seafloor Photographs

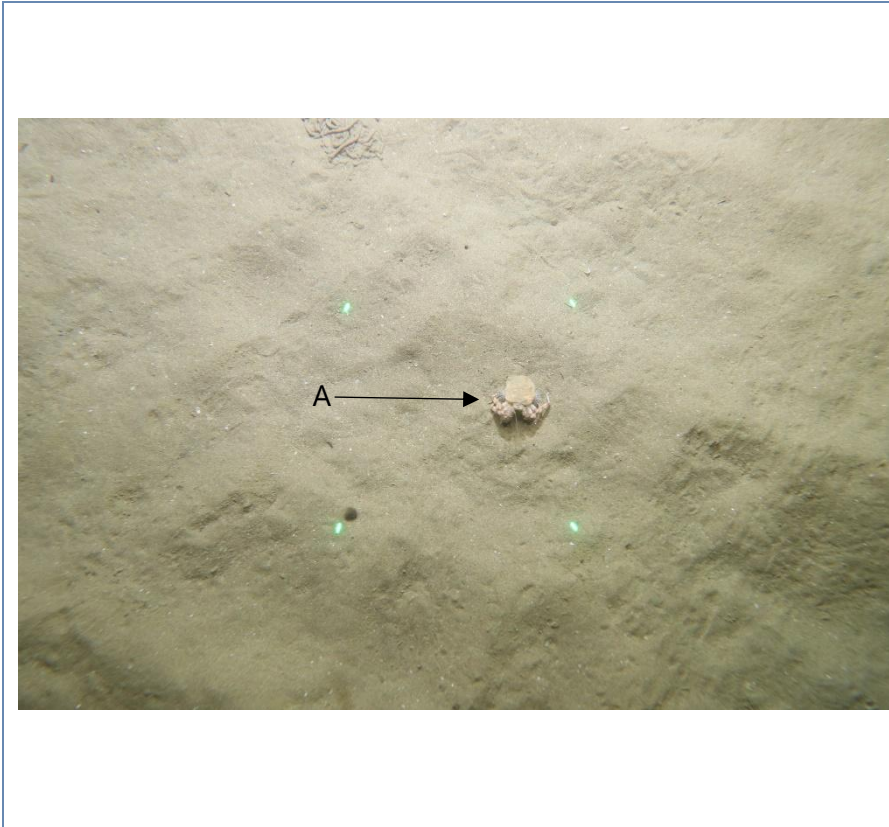
Station MCW-A-ST01



Photograph:
MCW-A-ST01_02

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-A-ST01_08

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
Faunal casts

Station MCW-A-ST02



Photograph:
MCW-A-ST02_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Thornback ray (*Raja clavata*)



Photograph:
MCW-A-ST02_11

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
Faunal casts

Station MCW-A-ST03



Photograph:
MCW-A-ST03_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Dragonet (*Callionymus* sp.)
Faunal casts



Photograph:
MCW-A-ST03_12

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
Faunal casts and tubes

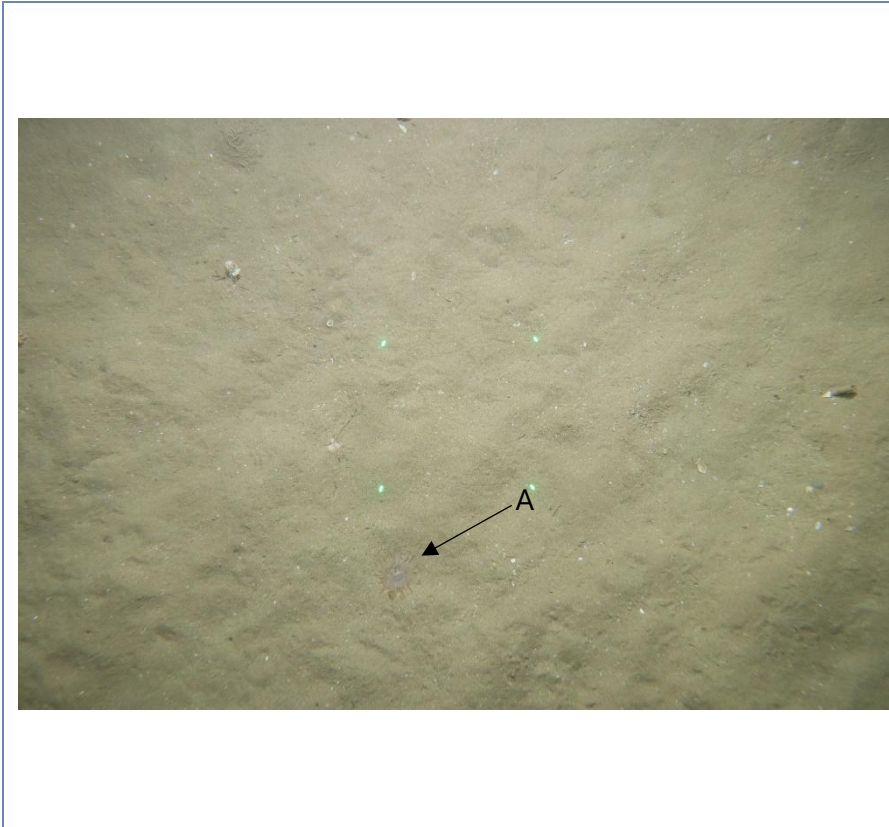
Station MCW-A-ST05



Photograph:
MCW-A-ST05_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crabs (Paguroidea)



Photograph:
MCW-A-ST05_09

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Anemone (Actiniaria)
Faunal casts and tubes

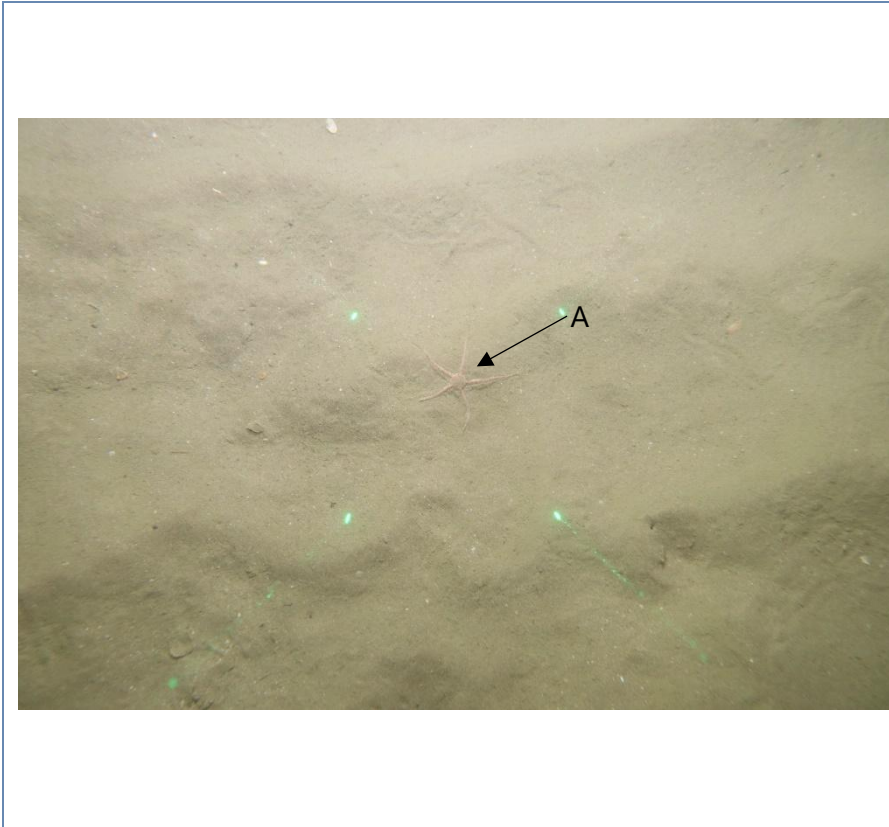
Station MCW-A-ST07A



Photograph:
MCW-A-ST07A_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Ocean quahog shell (*Arctica islandica*)



Photograph:
MCW-A-ST07A_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Brittlestar (Ophiuroidea)

Station MCW-A-ST08A



Photograph:
MCW-A-ST08A_08

Sediment Type:
Coarse sediment including shell hash, sand, gravel, and cobbles with small scale ripples

Fauna:
A: Barnacles (Sessilia)
B: Serpulid worms (Serpulidae)



Photograph:
MCW-A-ST08A_14

Sediment Type:
Slightly gravelly sand with small scale ripples, shell fragments and cobbles

Fauna:
No fauna observed

Station MCW-A-ST12



Photograph:
MCW-A-ST12_03

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Soleidae)
Faunal casts



Photograph:
MCW-A-ST12_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
Faunal casts

Station MCW-A-ST14



Photograph:
MCW-A-ST14_03

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)



Photograph:
MCW-A-ST14_12

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
No fauna observed

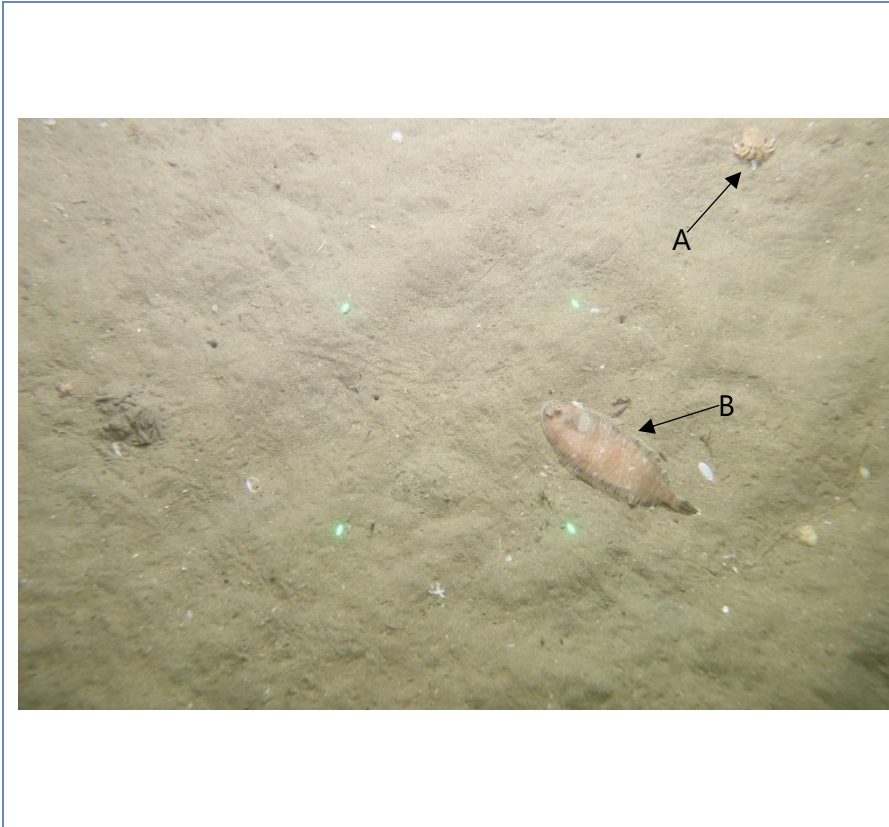
Station MCW-A-ST22



Photograph:
MCW-A-ST22_03

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Pleuronectiformes)
Faunal casts and tubes



Photograph:
MCW-A-ST22_11

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
B: Solenette (*Buglossidium luteum*)
Faunal casts

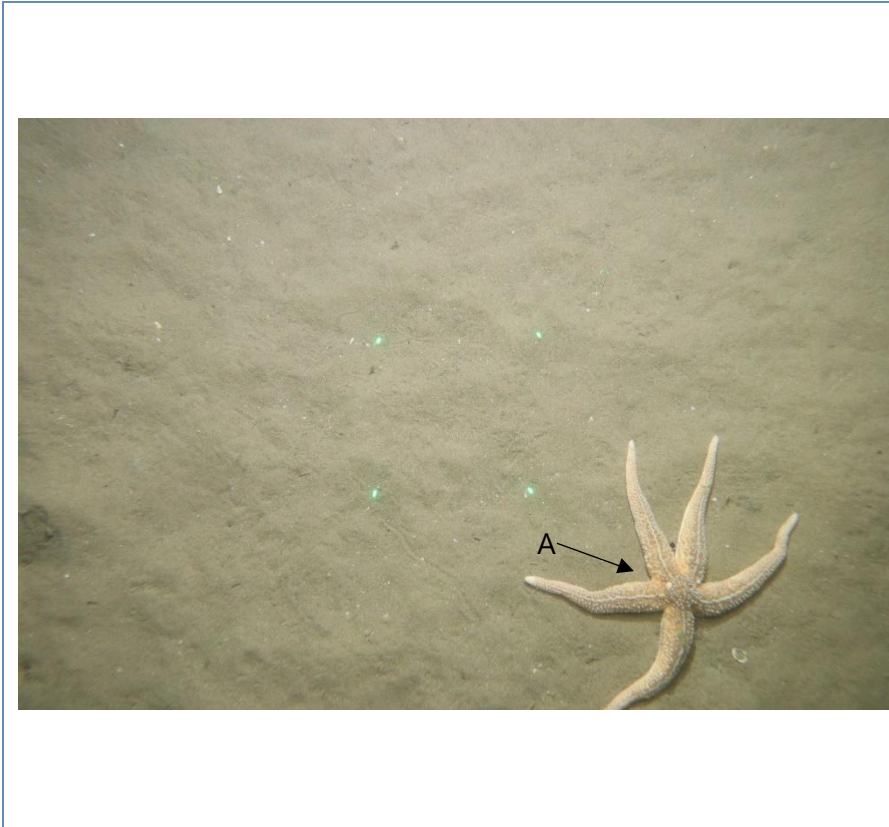
Station MCW-A-ST34



Photograph:
MCW-A-ST34_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Squid (*Sepiola* sp.)




Photograph:
MCW-A-ST34_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

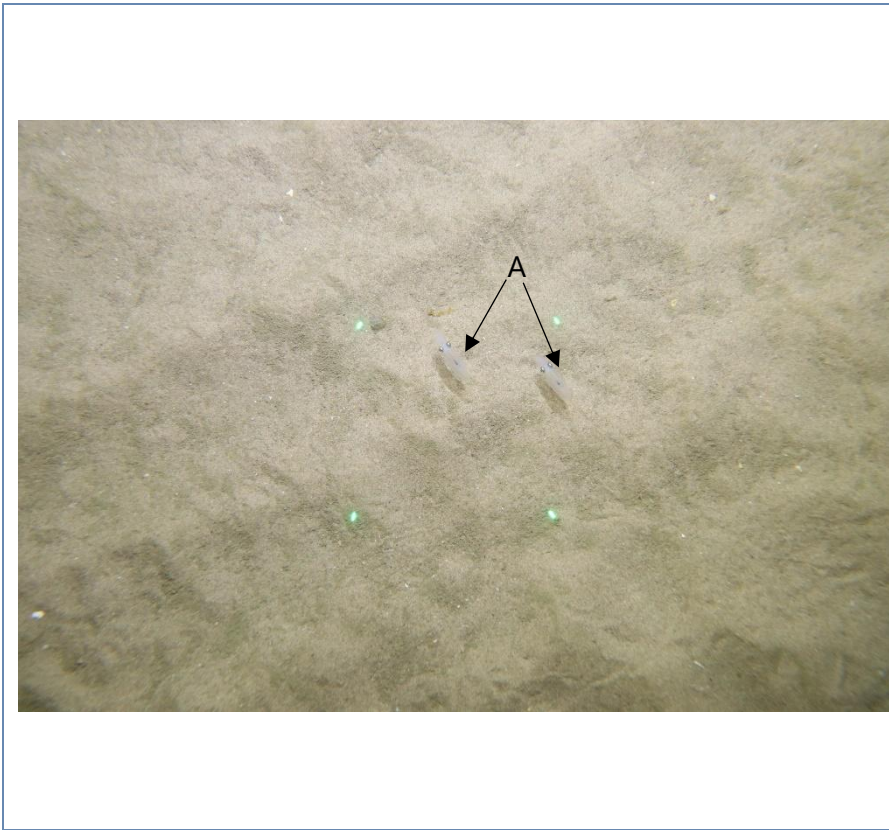
Fauna:
A: Starfish (*Asterias rubens*)

Station MCW-A-ST36

	<p>Photograph: MCW-A-ST36_03</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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	<p>Photograph: MCW-A-ST36_09</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-A-ST44A



Photograph:
MCW-A-ST44A_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Squid (Loliginigae)

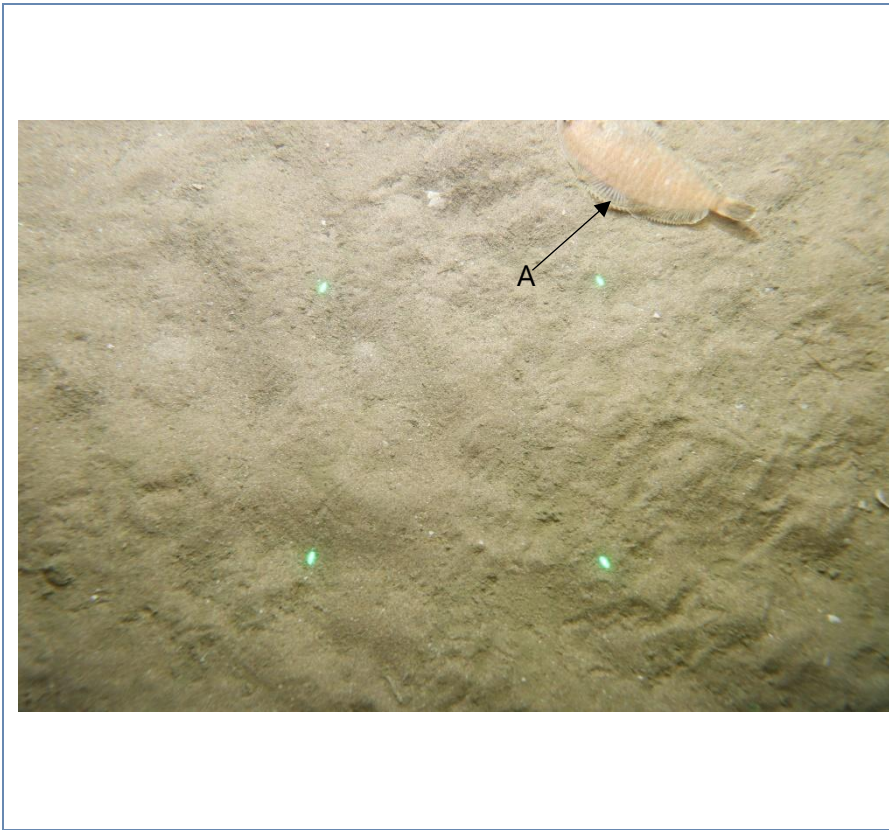


Photograph:
MCW-A-ST44A_14

Sediment Type:
Gravelly sand with shell fragments

Fauna:
A: Hermit crab (Paguroidea)

Station MCW-A-ST55



Photograph:
MCW-A-ST55_09

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Soleidae)



Photograph:
MCW-A-ST55_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Soleidae)
B: Hermit crab (Paguroidea)

Station MCW-B-ST09A



Photograph:
MCW-B-ST09A_04

Sediment Type:
Slightly gravelly muddy sand with small scale ripples and shell fragments

- Fauna:**
A: Shrimp (Caridea)
B: Fish (Osteichthyes)
C: Sand eels (Ammodytidae)

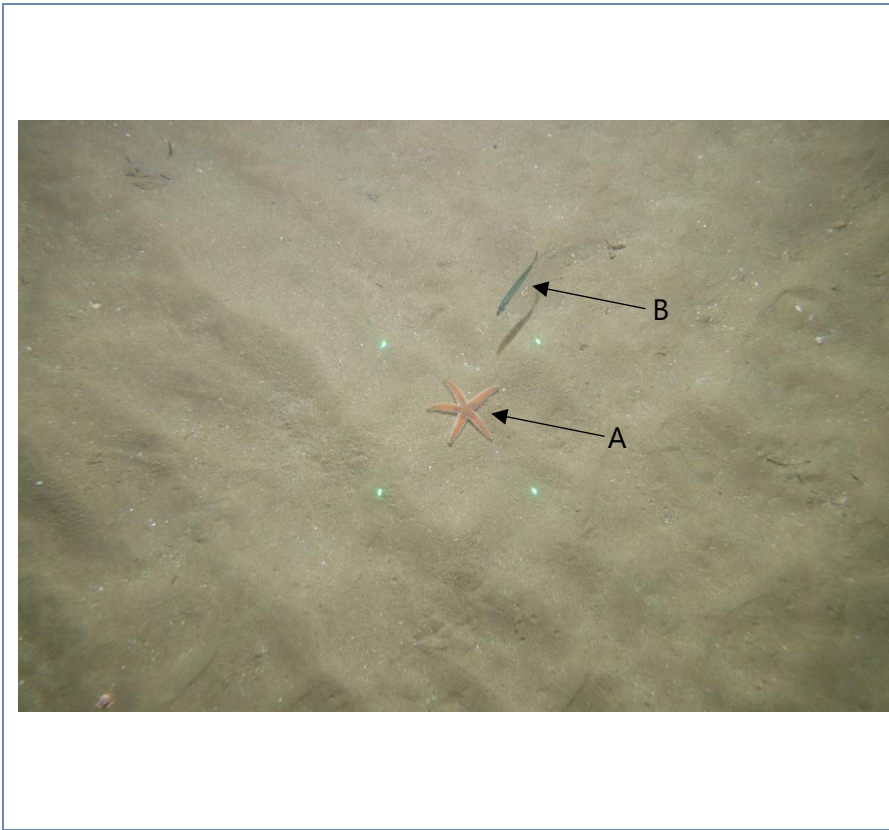


Photograph:
MCW-B-ST09A_13

Sediment Type:
Slightly gravelly muddy sand with small scale ripples and shell fragments

- Fauna:**
A: Fish (Osteichthyes)

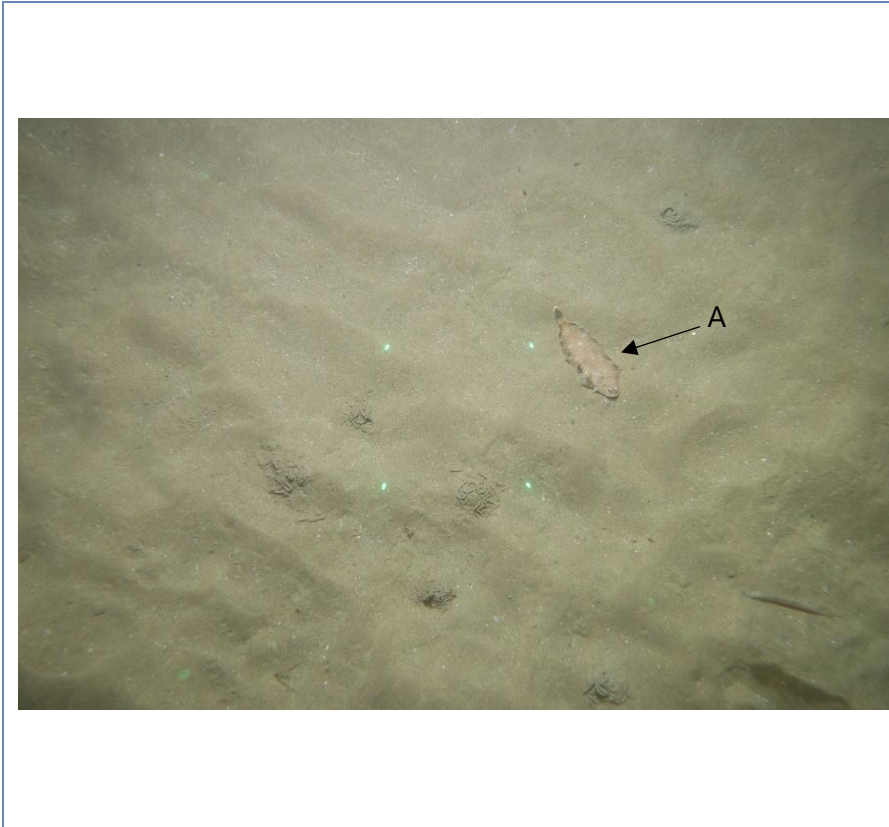
Station MCW-B-ST10



Photograph:
MCW-B-ST10_04

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Starfish (*Luidia sarsii*)
B: Fish (Clupeidae)



Photograph:
MCW-B-ST10_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (*Microchirus variegatus*)
Faunal casts

Station MCW-B-ST17A



Photograph:
MCW-B-ST17A_04

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
A: Gurnard (Triglidae)
B: Fish (Osteichthyes)



Photograph:
MCW-B-ST17A_09

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
A: Mackerel (*Scomber scombrus*)
B: Plaice (*Pleuronectes platessa*)

Station MCW-B-ST18A



Photograph:
MCW-B-ST18A_08

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Fish (Osteichthyes)



Photograph:
MCW-B-ST18A_12

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Burrowing anemone (Ceriantharia)
B: Fish (Osteichthyes)
Faunal casts

Station MCW-B-ST19A



Photograph:
MCW-B-ST19A_03

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)



Photograph:
MCW-B-ST19A_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Pleuronectiformes)

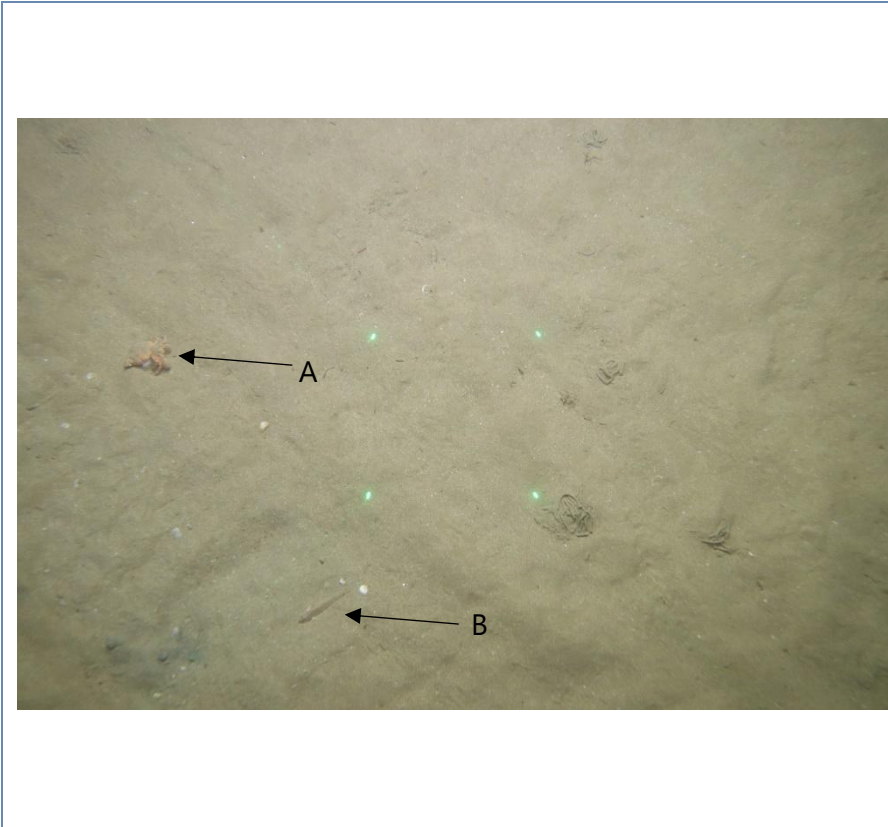
Station MCW-B-ST28



Photograph:
MCW-B-ST28_03

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Brittlestar (Ophiuroidea)
B: Worm (Polychaeta)



Photograph:
MCW-B-ST28_11

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
B: Fish (Osteichthyes)
Faunal casts

Station MCW-B-ST29A



Photograph:
MCW-B-ST29A_19

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Starfish (*Luidia sarsii*)
Faunal casts



Photograph:
MCW-B-ST29A_21

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Mackerel (*Scomber scombrus*)
B: Fish (Osteichthyes)
Faunal casts

Station MCW-B-ST30A



Photograph:
MCW-B-ST30A_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Fish (Osteichthyes)



Photograph:
MCW-B-ST30A_14

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-B-ST38A



Photograph:
MCW-B-ST38A_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crabs (Paguroidea)



Photograph:
MCW-B-ST38A_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Dragonet (*Callionymidae*)

Station MCW-B-ST57



Photograph:
MCW-B-ST57_09

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-B-ST57_14

Sediment Type:
Gravelly sand with shell fragments

Fauna:
A: Faunal turf (Hydrozoa/Bryozoa)

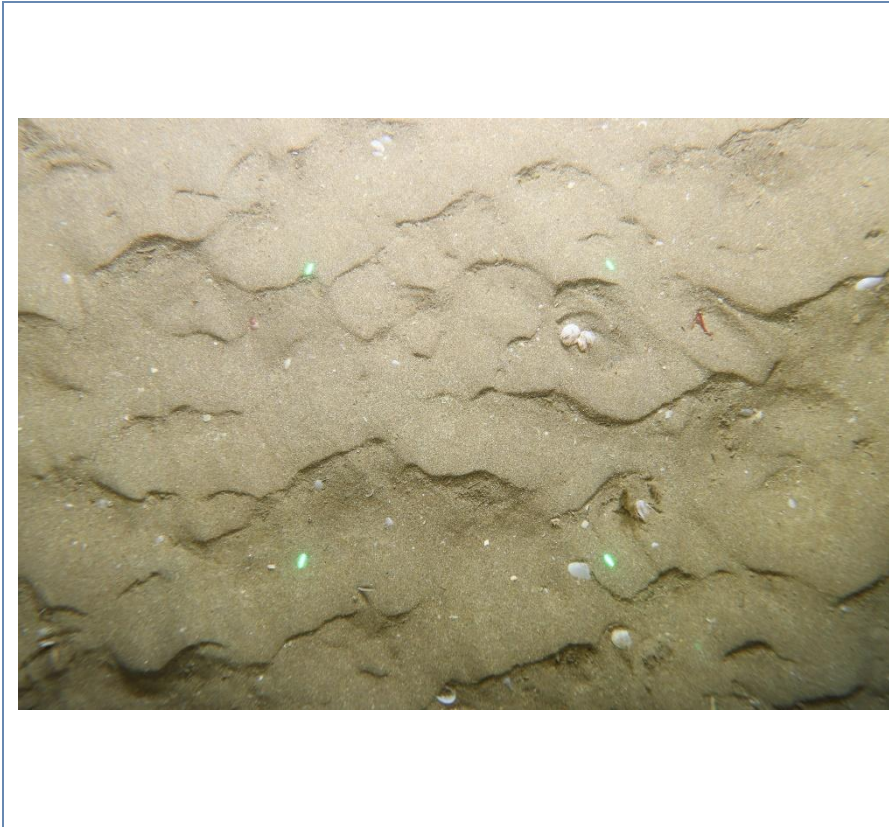
Station MCW-B-ST59A



Photograph:
MCW-B-ST59A_04

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)
Faunal tube

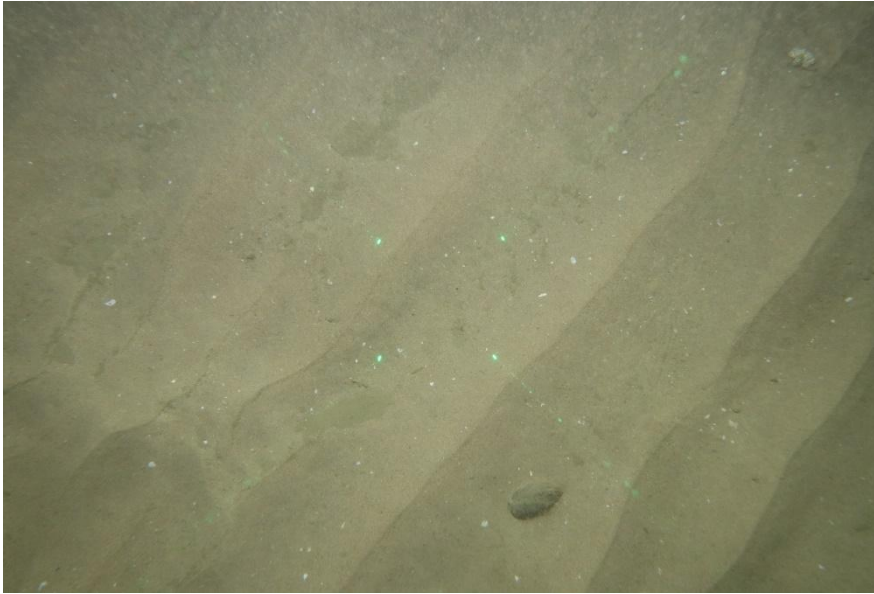


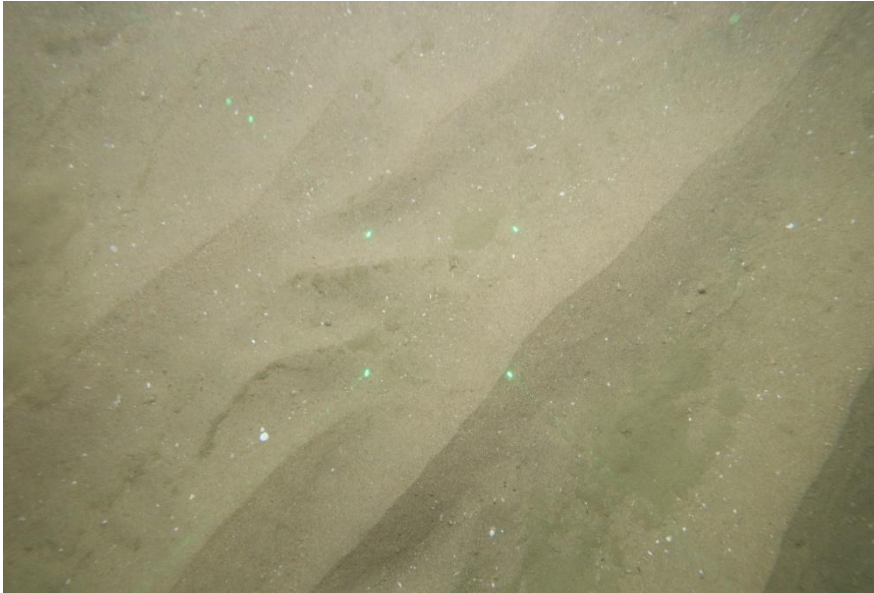
Photograph:
MCW-B-ST59A_11

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments


Fauna:
No fauna observed


Station MCW-C-ST20

	<p>Photograph: MCW-C-ST20_03</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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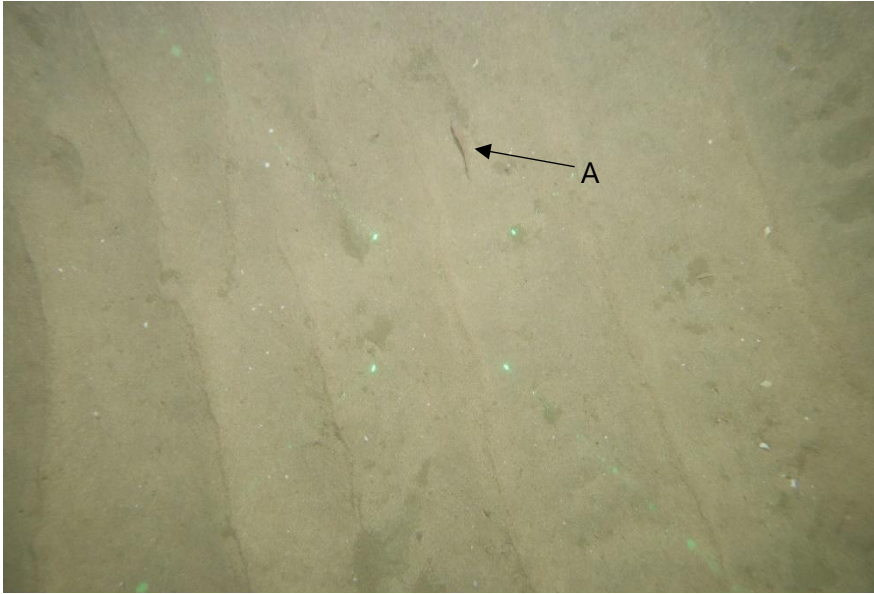
	<p>Photograph: MCW-C-ST20_09</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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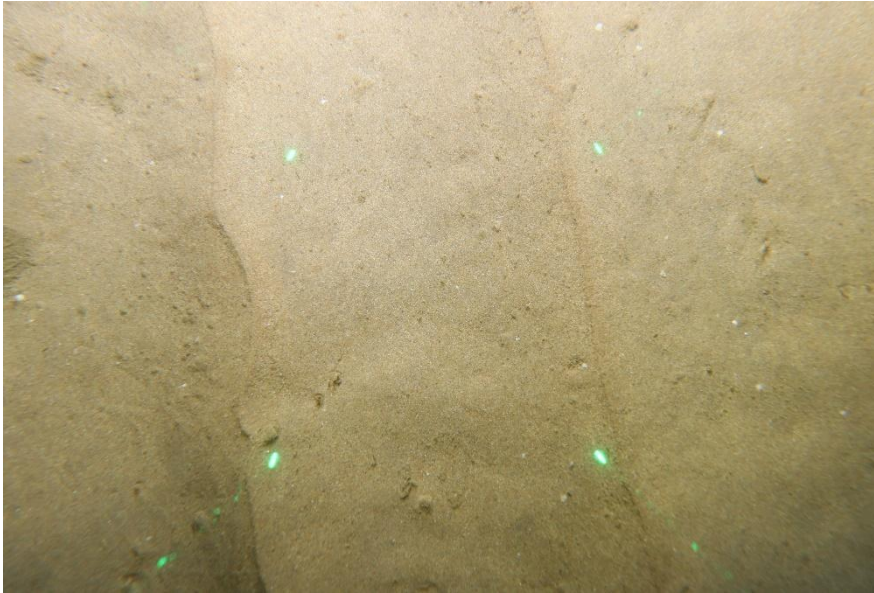
Station MCW-C-ST31

	<p>Photograph: MCW-C-ST31_02</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: A: Hermit crab (Paguroidea)</p>
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	<p>Photograph: MCW-C-ST31_05</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-C-ST32

	<p>Photograph: MCW-C-ST32_04</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: A: Fish (Osteichthyes)</p>
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	<p>Photograph: MCW-C-ST32_09</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-C-ST41



Photograph:
MCW-C-ST41_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Squid (*Loliginidae*)



Photograph:
MCW-C-ST41_19

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Squid (*Loliginidae*)

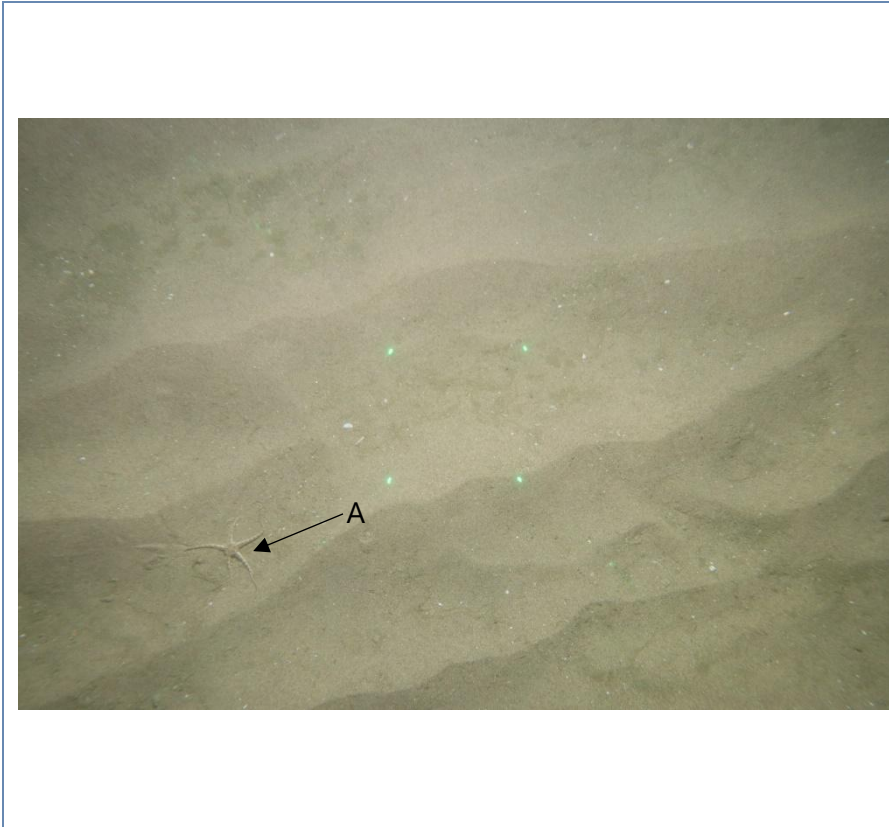
Station MCW-C-ST42



Photograph:
MCW-C-ST42_04

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-C-ST42_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Brittlestar (Ophiuroidea)

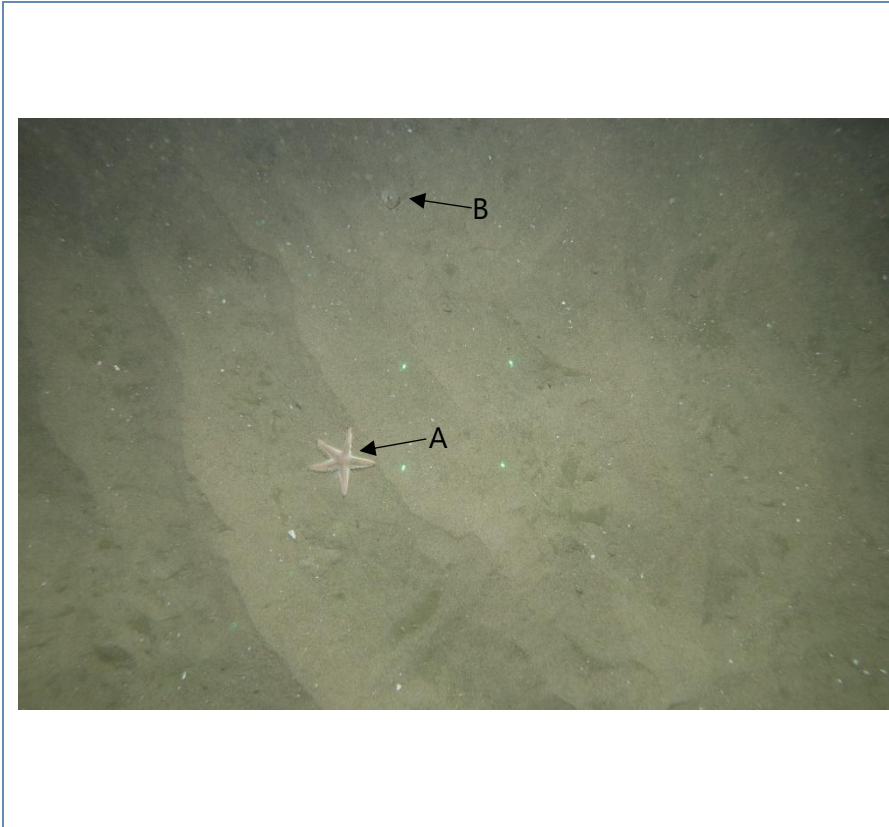
Station MCW-C-ST43



Photograph:
MCW-C-ST43_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)

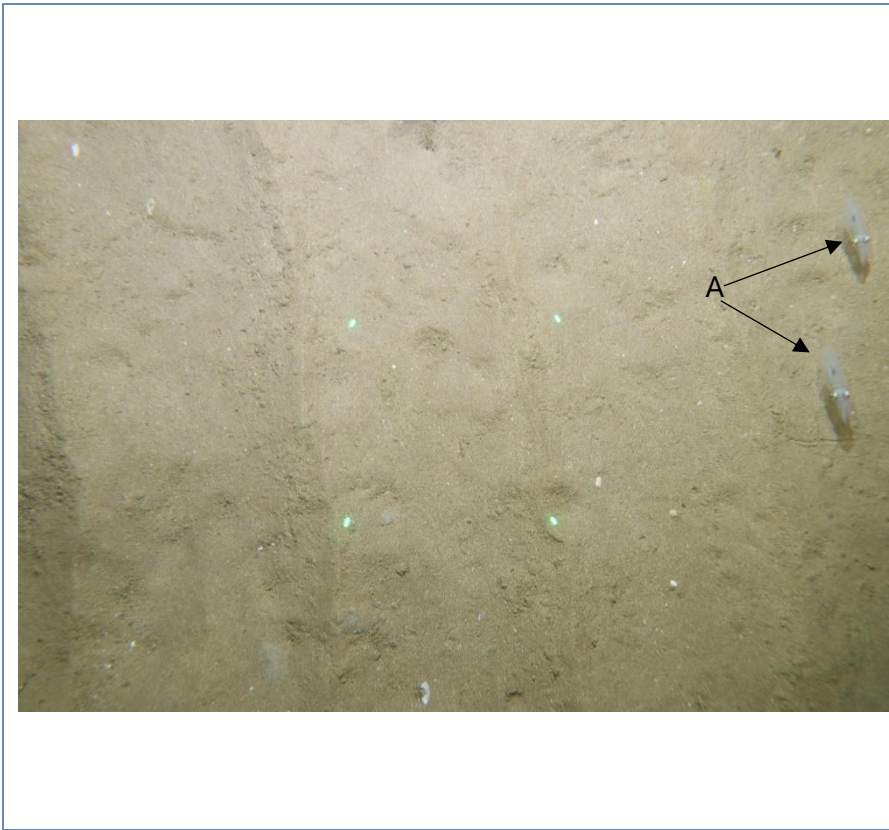


Photograph:
MCW-C-ST43_09

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Starfish (*Astropecten irregularis*)
B: Flatfish (Pleuronectiformes)

Station MCW-C-ST51



Photograph:
MCW-C-ST51_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Squid (Loliginidae)

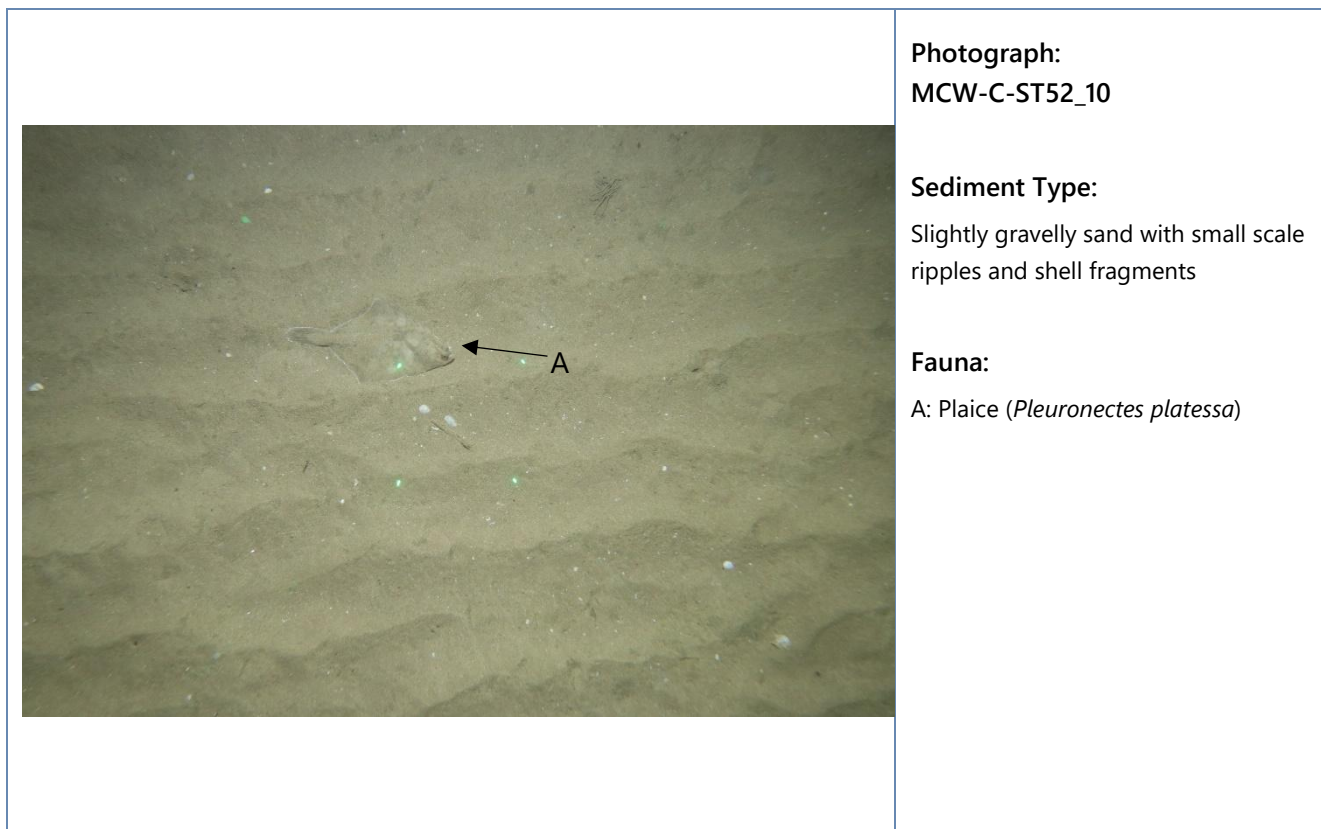
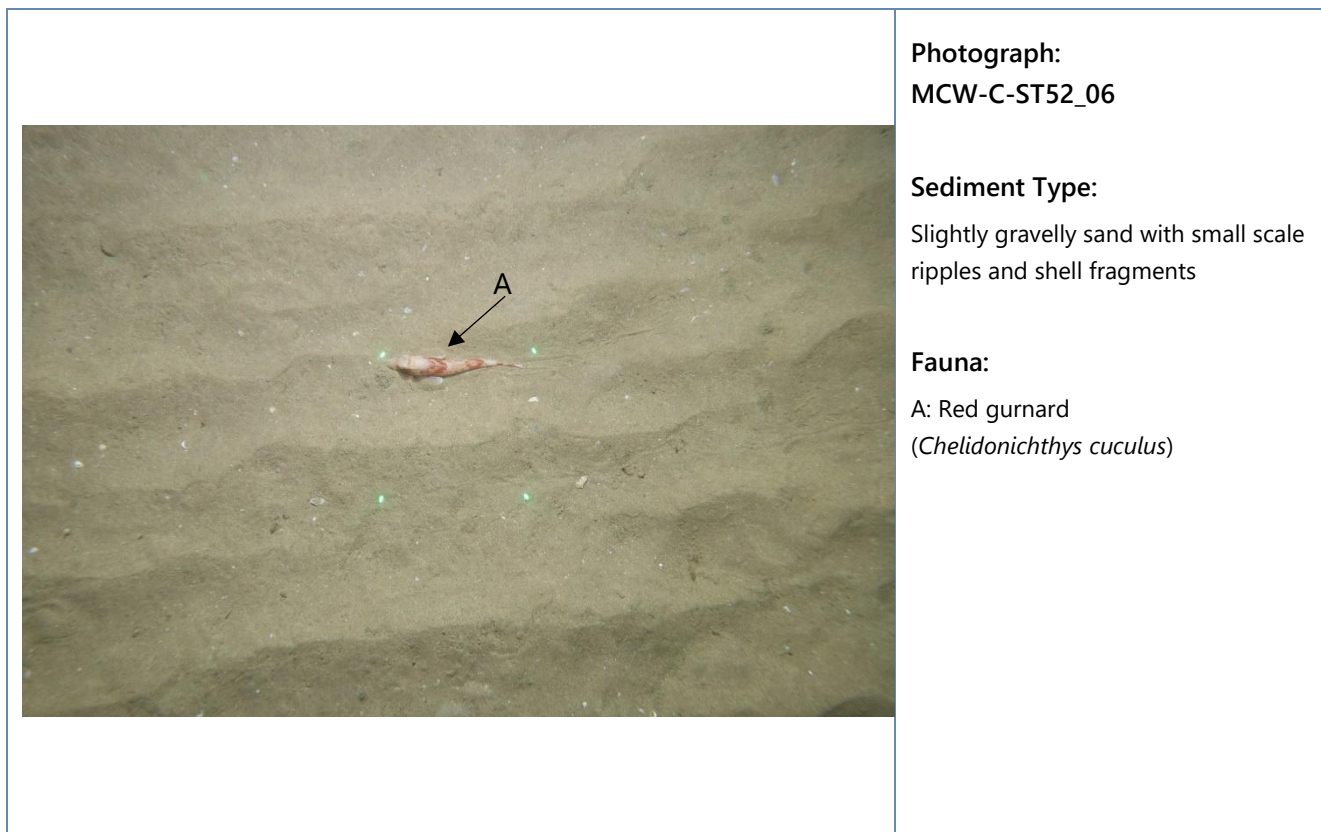


Photograph:
MCW-C-ST51_09

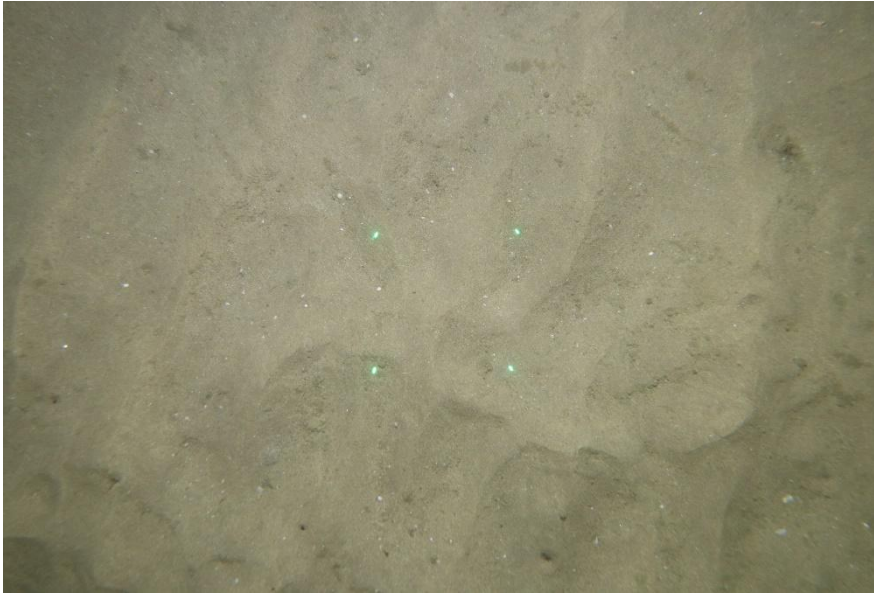
Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

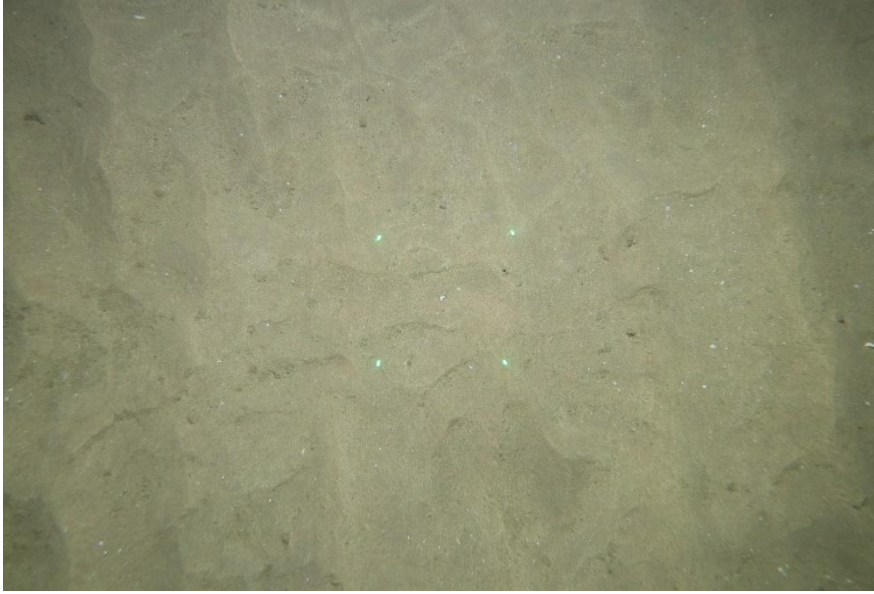
Fauna:
A: Dragonet (*Callionymidae*)
Faunal casts

Station MCW-C-ST52

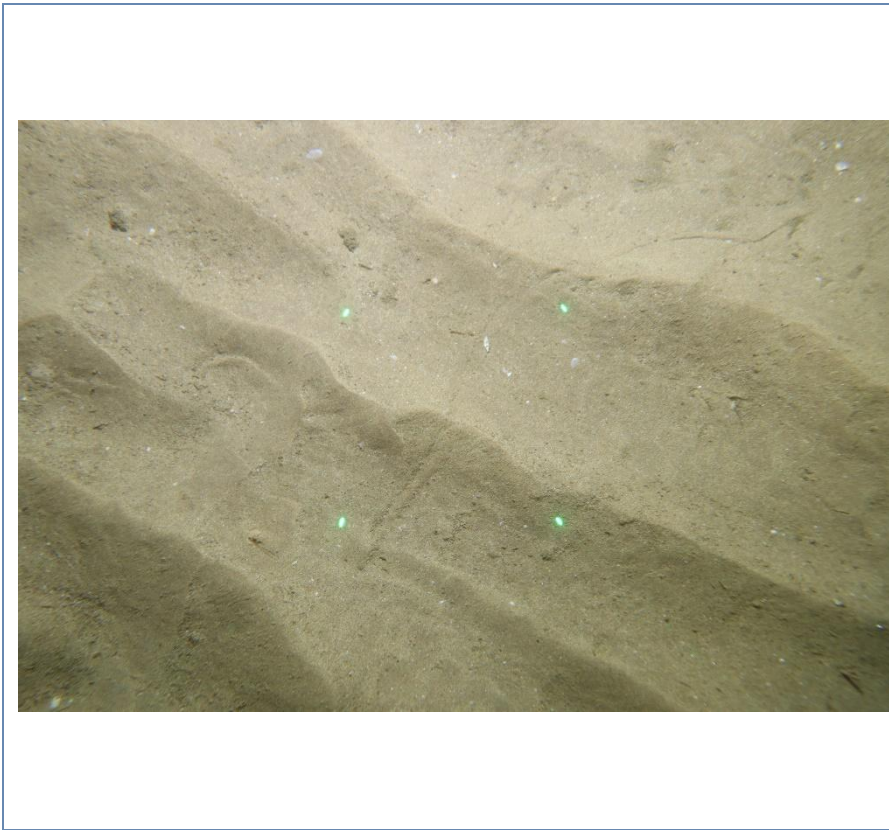


Station MCW-C-ST53

	<p>Photograph: MCW-C-ST53_04</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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	<p>Photograph: MCW-C-ST53_13</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-C-ST54



Photograph:
MCW-C-ST54_02

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-C-ST54_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-C-ST62



Photograph:
MCW-C-ST62_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Dragonets (*Callionymidae*)

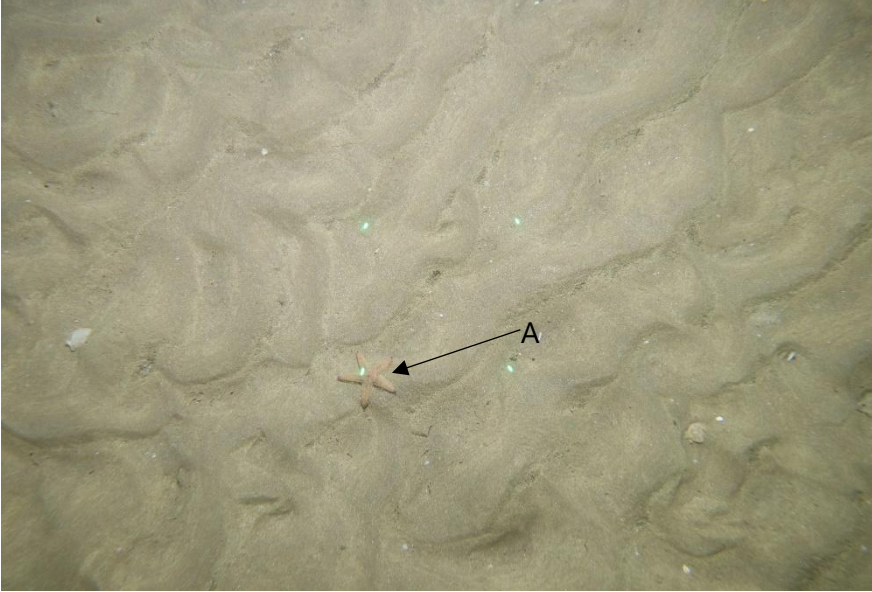



Photograph:
MCW-C-ST62_14

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-C-ST63

	<p>Photograph: MCW-C-ST63_03</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: A: Starfish (<i>Astropecten irregularis</i>)</p>
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	<p>Photograph: MCW-C-ST63_06</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-C-ST70



Photograph:
MCW-C-ST70_02

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-C-ST70_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-C-ST71



Photograph:
MCW-C-ST71_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-C-ST71_11

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-C-ST75



Photograph:
MCW-C-ST75_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (*Paguroidea*)

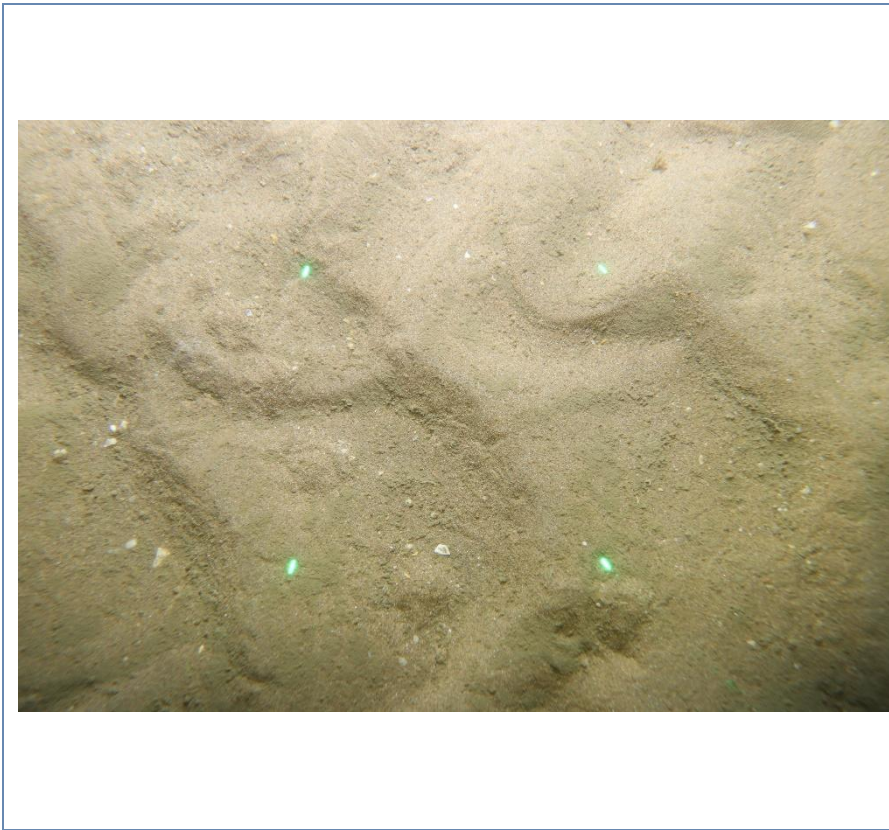


Photograph:
MCW-C-ST75_13

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Plaice (*Pleuronectes platessa*)

Station MCW-C-ST77



Photograph:
MCW-C-ST77_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-C-ST77_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-C-ST79



Photograph:
MCW-C-ST79_02

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Crab (Brachyura)



Photograph:
MCW-C-ST79_13

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

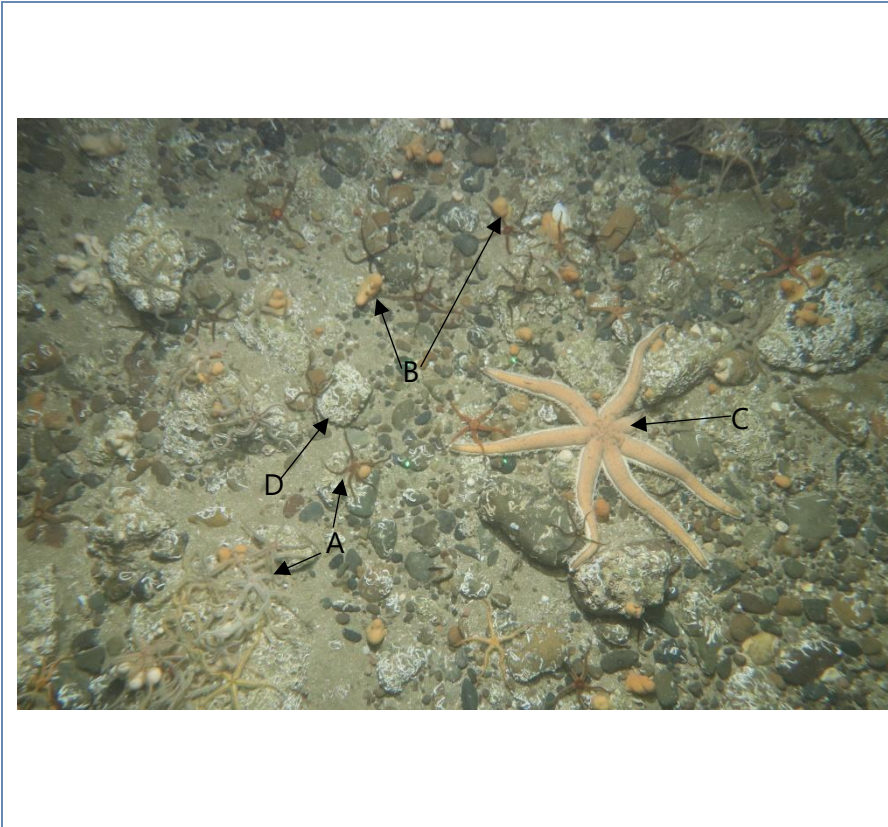
Station MCW-C-ST83



Photograph:
MCW-C-ST83_11

Sediment Type:
Coarse sediment with cobbles and boulders, interspersed with sand

- Fauna:**
- A: Brittlestars (Ophiuroidea including *Ophiothrix fragilis*)
 - B: Soft coral (*Alcyonium digitatum*)
 - C: Serpulid worms (Serpulidae)



Photograph:
MCW-C-ST83_16

Sediment Type:
Coarse sediment with cobbles and boulders, interspersed with sand

- Fauna:**
- A: Brittlestars (Ophiuroidea)
 - B: Soft coral (*Alcyonium digitatum*)
 - C: Seven-armed starfish (*Luidia ciliaris*)
 - D: Serpulid worms (Serpulidae)

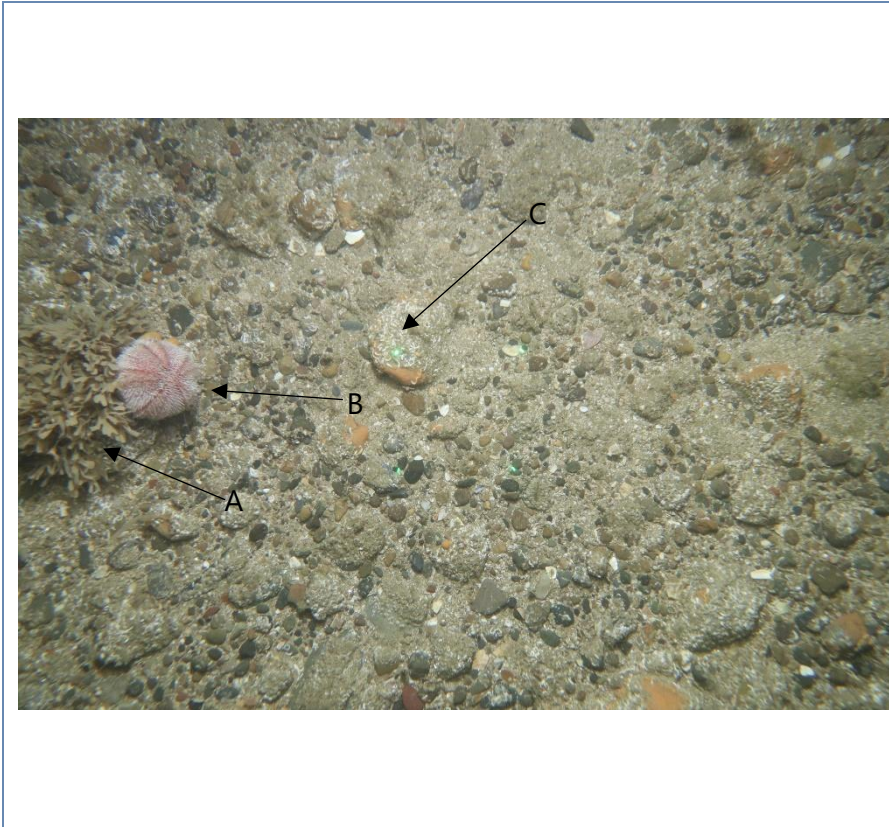
Station MCW-C-ST91



Photograph:
MCW-C-ST91_05

Sediment Type:
Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments

Fauna:
A: Anemone (Actiniaria)
B: Soft coral (*Alcyonium digitatum*)

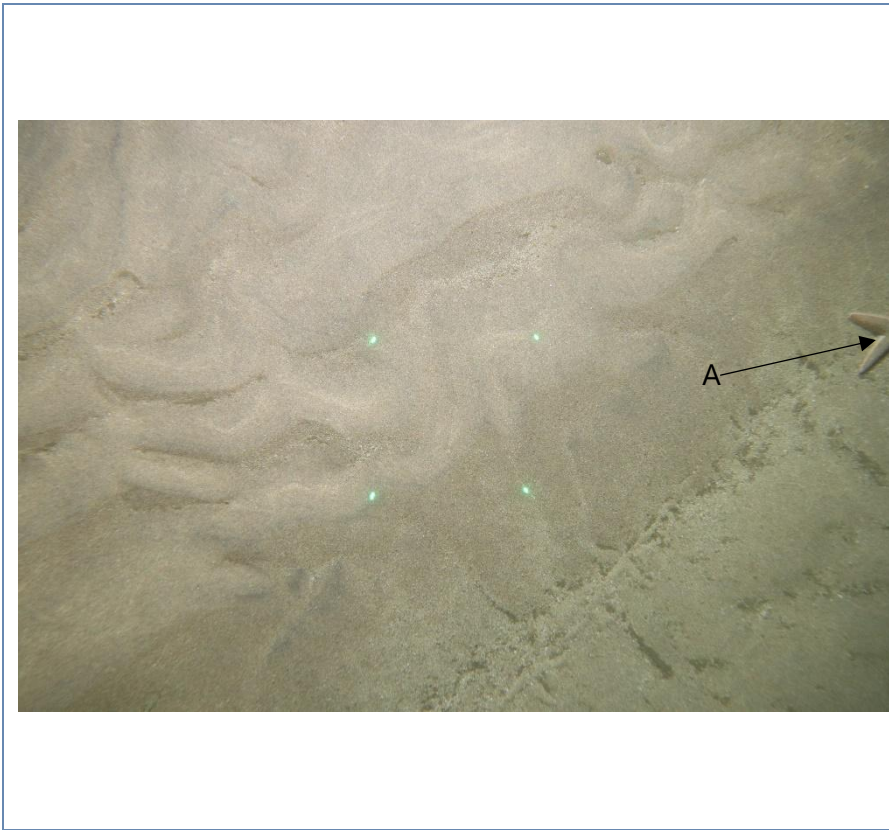


Photograph:
MCW-C-ST91_07

Sediment Type:
Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments

Fauna:
A: Bryozoan (*Flustra foliacea*)
B: Sea urchin (*Echinus esculentus*)
C: Serpulid worms (Serpulidae)

Station MCW-C-ST92



Photograph:
MCW-C-ST92_02

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Starfish (*Astropecten irregularis*)




Photograph:
MCW-C-ST92_08

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-D-ST64

	<p>Photograph: MCW-D-ST64_09</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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	<p>Photograph: MCW-D-ST64_12</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-D-ST72A



Photograph:
MCW-D-ST72A_04

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)

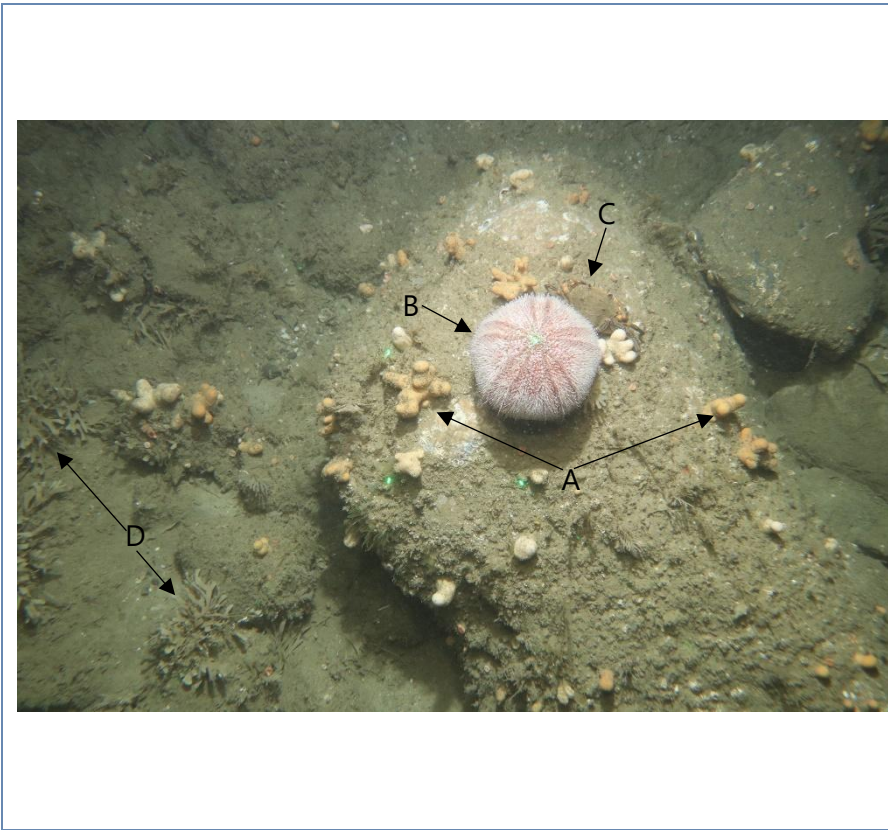


Photograph:
MCW-D-ST72A_12

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

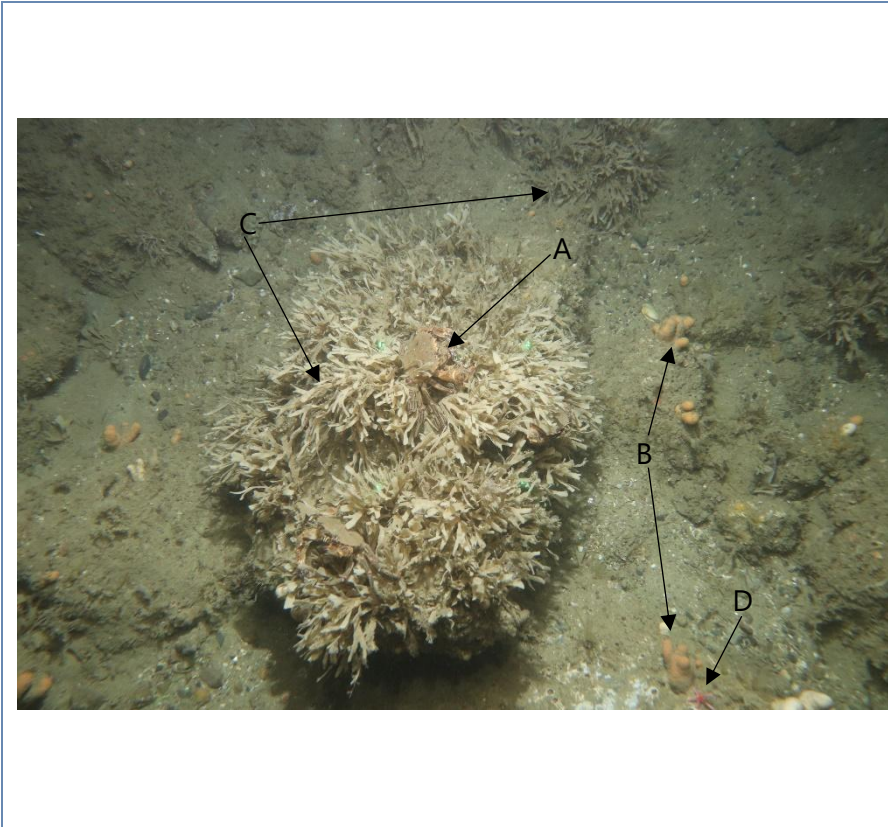
Station MCW-D-ST73



Photograph:
MCW-D-ST73_21

Sediment Type:
Cobbles and boulders interspersed with slightly gravelly sand and shell fragments

- Fauna:**
- A: Soft coral (*Alcyonium digitatum*)
 - B: Sea urchin (*Echinus esculentus*)
 - C: Crab (*Necora puber*)
 - D: Bryozoan (*Flustra foliacea*)

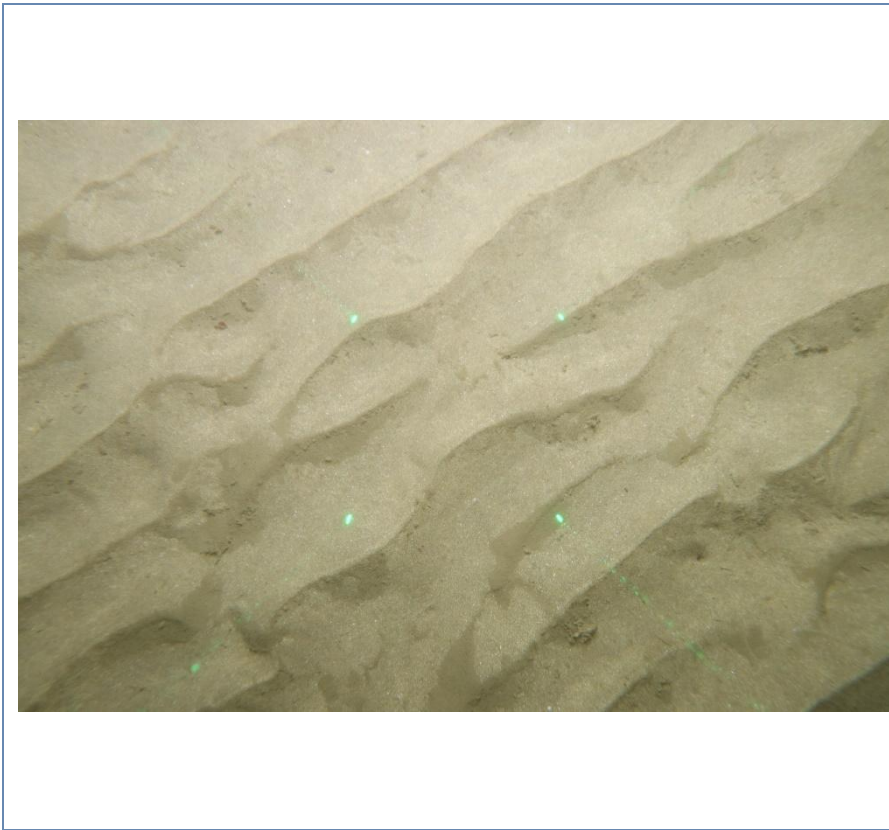


Photograph:
MCW-D-ST73_34

Sediment Type:
Cobbles and boulders interspersed with slightly gravelly sand and shell fragments

- Fauna:**
- A: Crab (*Necora puber*)
 - B: Soft coral (*Alcyonium digitatum*)
 - C: Bryozoan (*Flustra foliacea*)
 - D: Starfish (*Henricia* sp.)

Station MCW-D-ST80



Photograph:
MCW-D-ST80_04

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



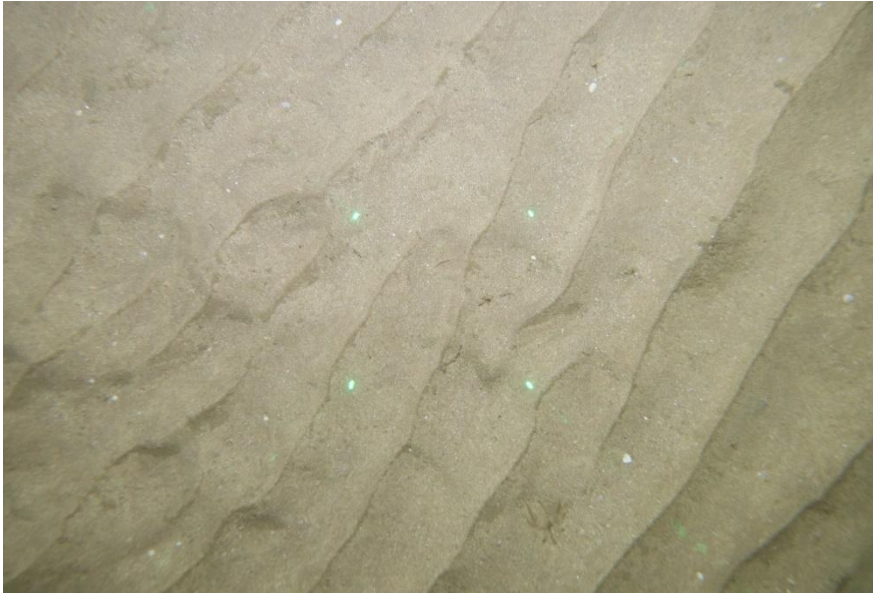
Photograph:
MCW-D-ST80_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

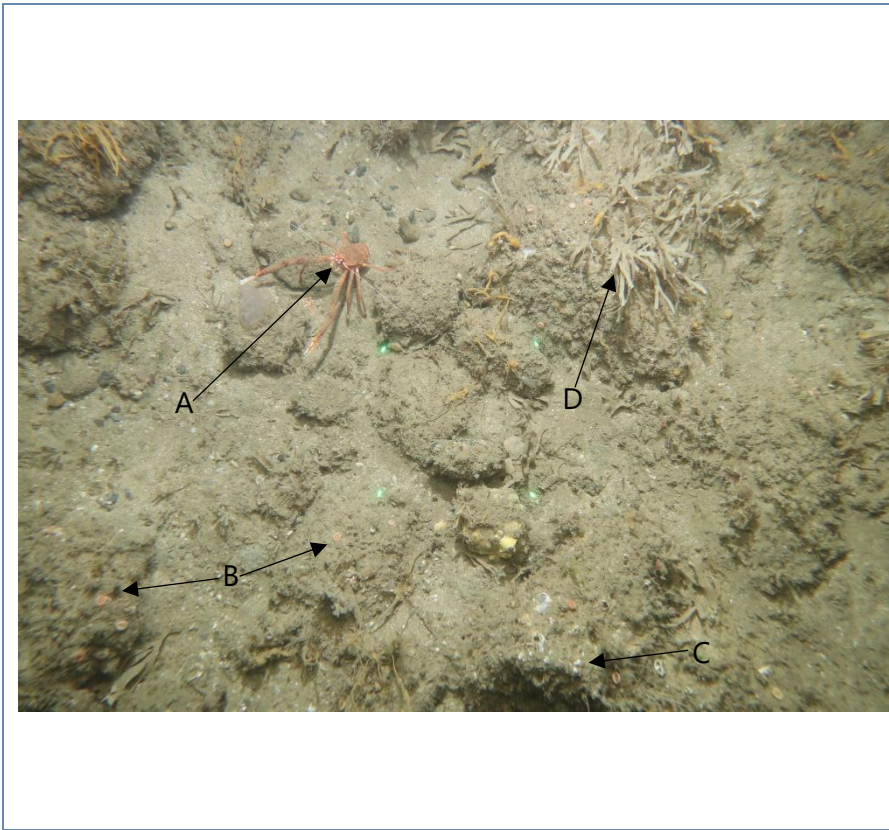
Fauna:
A: Brittlestar (Ophiuroidea)

Station MCW-D-ST81

	<p>Photograph: MCW-D-ST81_04</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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	<p>Photograph: MCW-D-ST81_06</p> <p>Sediment Type: Slightly gravelly sand with small scale ripples and shell fragments</p> <p>Fauna: No fauna observed</p>
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Station MCW-D-ST82



Photograph:
MCW-D-ST82_02

Sediment Type:
Cobbles and boulders interspersed with slightly gravelly sand and shell fragments

- Fauna:**
- A: Squat lobster (*Munida* sp.)
 - B: Cup corals (Caryophylliidae)
 - C: Barnacles (Sessilia)
 - D: Faunal turf (Hydrozoa/Bryozoa)



Photograph:
MCW-D-ST82_27

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-D-ST86A



Photograph:
MCW-D-ST86A_09

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
A: Mackerel (*Scomber scombrus*)

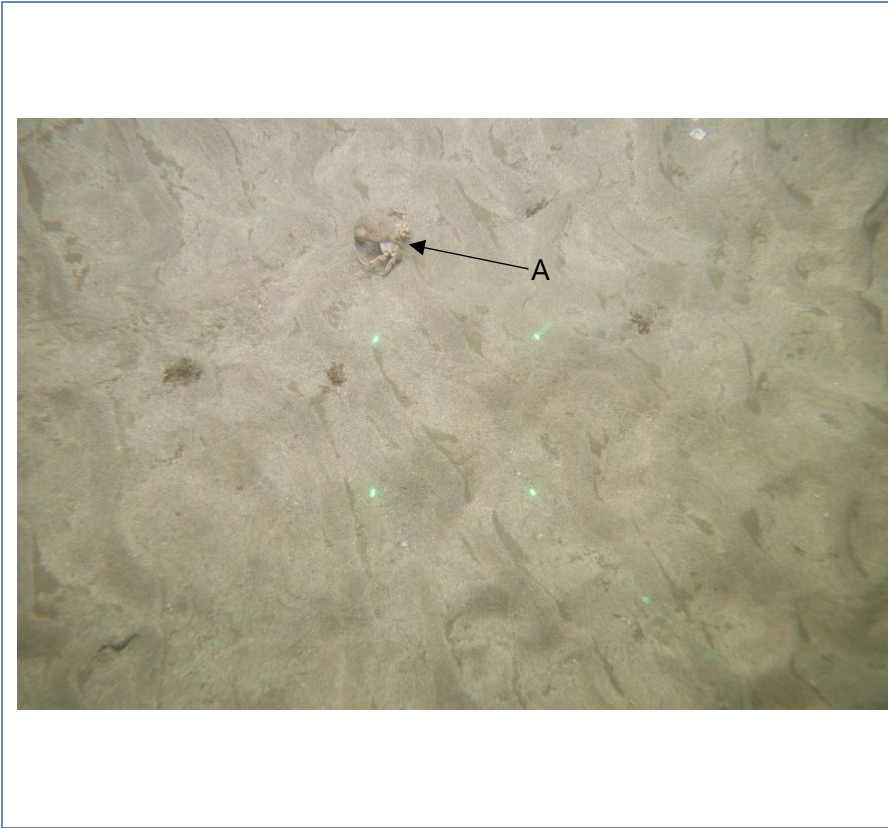


Photograph:
MCW-D-ST86A_10

Sediment Type:
Sand with small scale ripples and shell fragments

Fauna:
A: Mackerel (*Scomber scombrus*)
B: Red gurnard (*Chelidonichthys cuculus*)

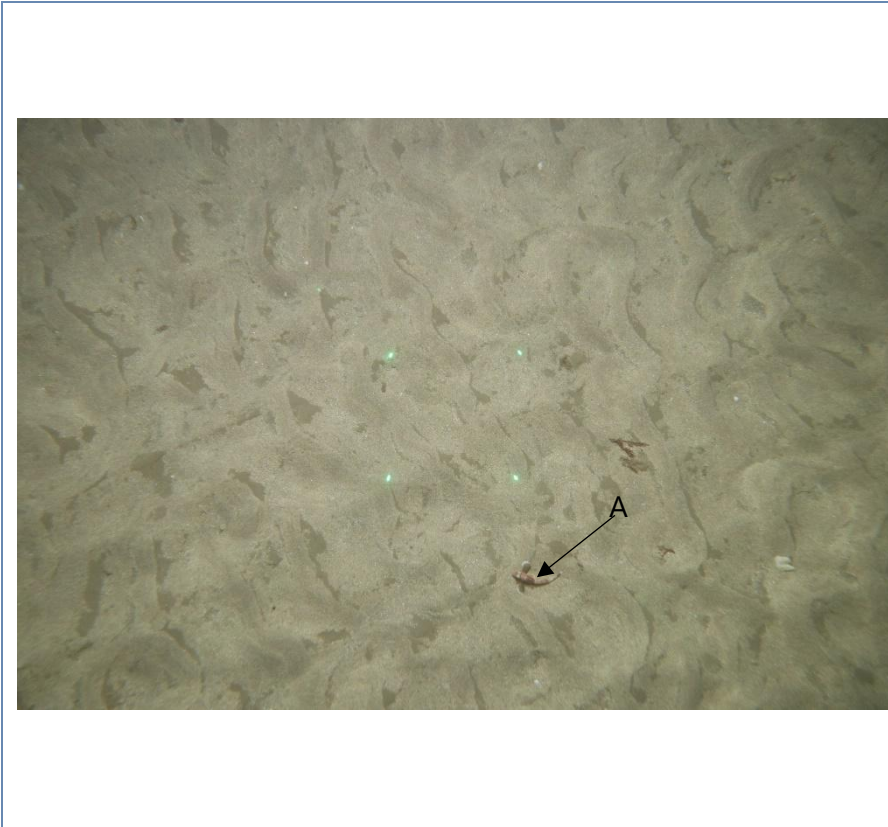
Station MCW-D-ST88A



Photograph:
MCW-D-ST88A_07

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Hermit crab (Paguroidea)

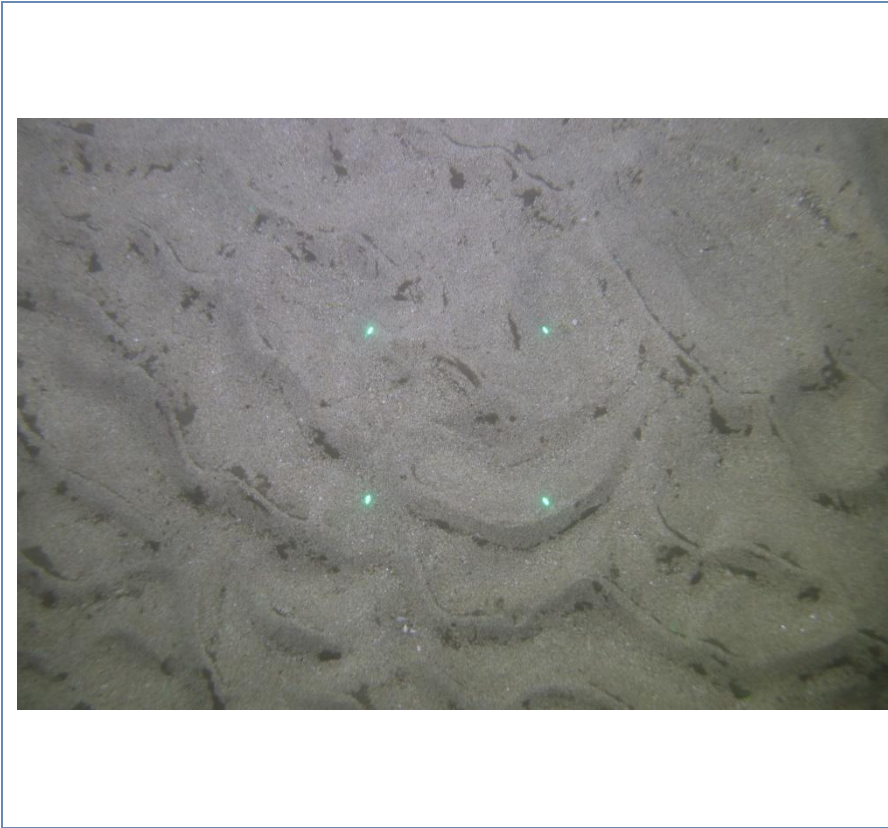


Photograph:
MCW-D-ST88A_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Gurnard (Triglidae)

Station MCW-D-ST89A



Photograph:
MCW-D-ST89A_01

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-D-ST89A_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Crab (*Corystes cassivelaunus*)

Station MCW-D-ST95A



Photograph:
MCW-D-ST95A_06

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Crab (Brachyura)

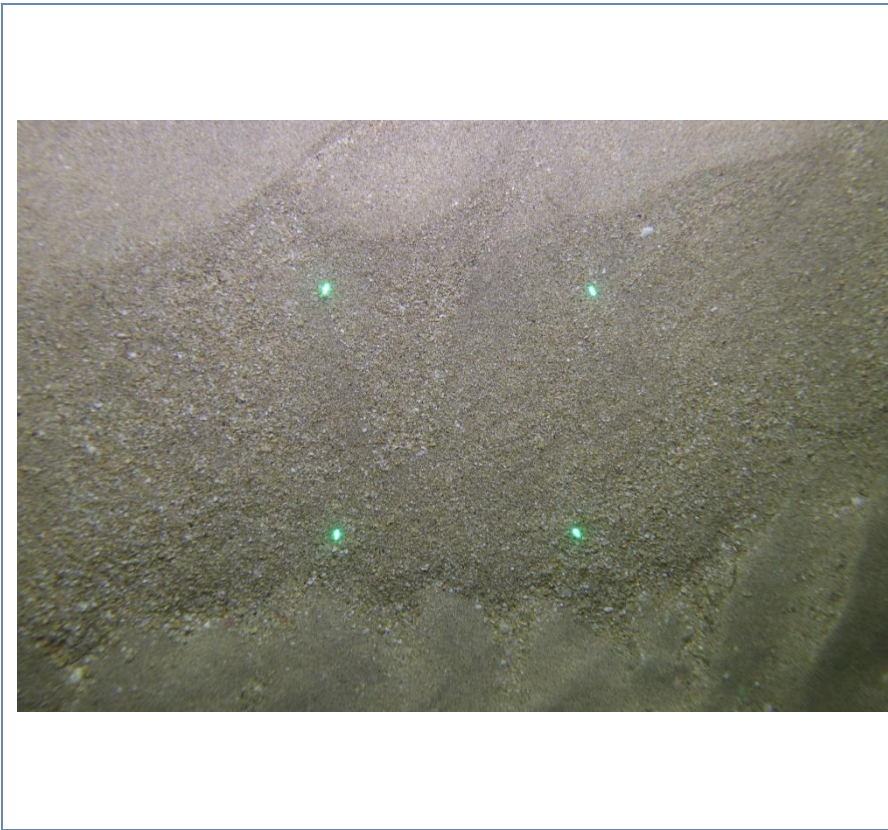


Photograph:
MCW-D-ST95A_12

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

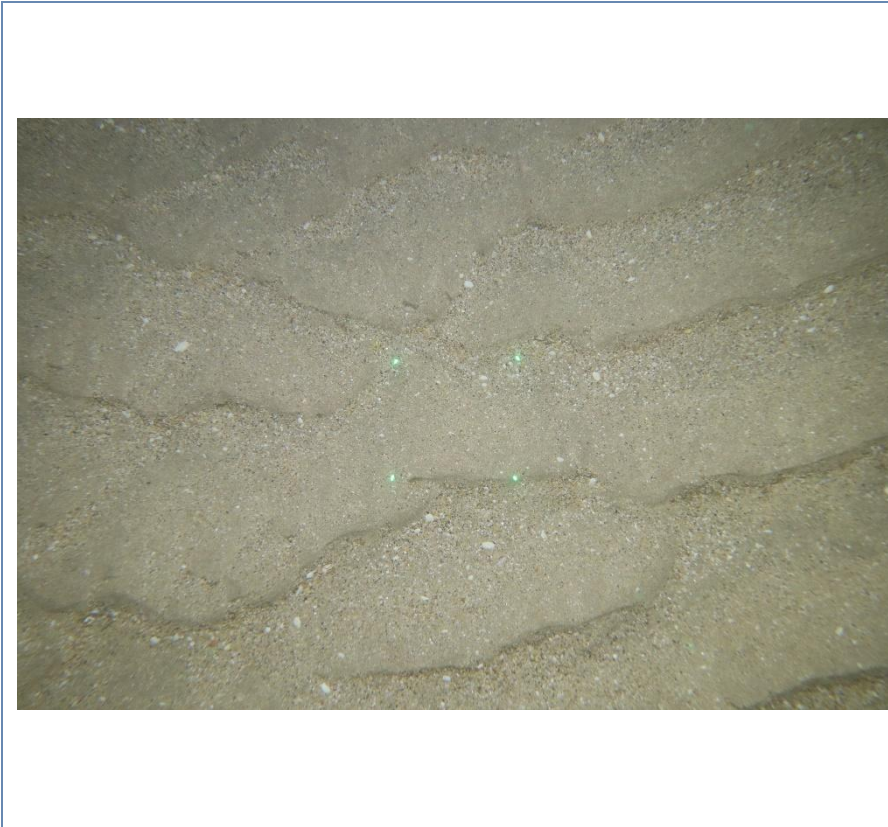
Station MCW-D-ST100A



Photograph:
MCW-D-ST100A_01

Sediment Type:
Gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-D-ST100A_03

Sediment Type:
Gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed

Station MCW-D-ST101



Photograph:
MCW-D-ST101_04

Sediment Type:
Gravelly sand with small scale ripples and shell fragments sporadic pebbles and cobbles

Fauna:
No fauna observed



Photograph:
MCW-D-ST101_18

Sediment Type:
Gravelly sand with small scale ripples and shell fragments

Fauna:
A: Dragonet (Callionymidae)

Station MCW-D-ST103A



Photograph:
MCW-D-ST103A_03

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
No fauna observed



Photograph:
MCW-D-ST103A_05

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments

Fauna:
A: Flatfish (Pleuronectiformes)

Station MCW-D-ST104



Photograph:
MCW-D-ST104_09

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments and sporadic cobbles

Fauna:
No fauna observed



Photograph:
MCW-D-ST104_10

Sediment Type:
Slightly gravelly sand with small scale ripples and shell fragments and sporadic cobbles

Fauna:
No fauna observed

Station MCW-D-ST108A



Photograph:
MCW-D-ST108A_04

Sediment Type:
Gravel with shell fragments, cobbles and infrequent boulders

Fauna:
A: Barnacles (Sessilia)
B: Serpulid worms (Serpulidae)



Photograph:
MCW-D-ST108A_20

Sediment Type:
Gravel with shell fragments, cobbles and infrequent boulders

Fauna:
A: Crab (Majoidea)
B: Barnacles (Sessilia)
C: Serpulid worms (Serpulidae)

Appendix H

Sensitive Habitat Assessments

H.1 Stony Reef

H.1.1 Stony Reef Assessment

Geodetic Parameters: ETRS89 / UTM Zone 29N [m]													
Date	Transect	Section Assessment	Time [UTC]	Video Coordinates		Length [m]	Area Observed [m ²]	Still Nos.	Sediment Description	Stony Reef Characteristic			Overall
				Easting [m]	Northing [m]					Composition [% cover cobbles and boulders]	Elevation	Biota [Epibiota % cover]	
24/10/2023	MCW-D-ST73	MCW-D-ST73_1	12:39:34	657 309.46	6 206 853.29	15	25	MCW-D-ST73_01 to MCW-D-ST73_02	Slightly gravelly sand with small scale ripples and shell fragments	< 10	Flat seafloor	< 80	Not a Reef
			12:42:04	657 323.74	6 206 850.28								
		MCW-D-ST73_2	12:42:04	657 323.74	6 206 850.28	2	4	MCW-D-ST73_03	Cobbles interspersed with slightly gravelly sand and shell fragments	10 – 40	< 64 mm	< 80	Low
			12:42:23	657 326.13	6 206 849.73								
		MCW-D-ST73_3	12:42:23	657 326.13	6 206 849.73	2	3	MCW-D-ST73_04 to MCW-D-ST73_05	Sand with numerous pebbles, cobbles and large boulders interspersed with small patches of coarse sand	10 – 40	64 mm – 5 m	< 80	Low
			12:42:50	657 328.10	6 206 849.36								
		MCW-D-ST73_4	12:42:50	657 328.10	6 206 849.36	3	6	MCW-D-ST73_06	Cobbles interspersed with slightly gravelly sand and shell fragments	10 – 40	< 64 mm	< 80	Low
			12:43:20	657 331.31	6 206 848.23								
		MCW-D-ST73_5	12:43:20	657 331.31	6 206 848.23	4	7	MCW-D-ST73_07 to MCW-D-ST73_08	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low
			12:44:08	657 335.33	6 206 846.59								
		MCW-D-ST73_6	12:44:08	657 335.33	6 206 846.59	4	7	MCW-D-ST73_09 to MCW-D-ST73_10	Cobbles interspersed with slightly gravelly sand and shell fragments	40 – 95	64 mm – 5 m	< 80	Medium
			12:44:46	657 339.28	6 206 845.29								
		MCW-D-ST73_7	12:44:46	657 339.28	6 206 845.29	35	60	MCW-D-ST73_11 to MCW-D-ST73_20	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low
			12:50:28	657 374.03	6 206 838.33								
		MCW-D-ST73_8	12:50:28	657 374.03	6 206 838.33	2	3	MCW-D-ST73_21	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	40 – 95	64 mm – 5 m	< 80	Medium
12:50:44	657 375.56		6 206 838.04										
MCW-D-ST73_9	12:50:44	657 375.56	6 206 838.04	11	19	MCW-D-ST73_22 to MCW-D-ST73_24	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low		
	12:52:29	657 386.16	6 206 835.08										
MCW-D-ST73_10	12:52:29	657 386.16	6 206 835.08	4	6	MCW-D-ST73_25	Cobbles interspersed with slightly gravelly sand and shell fragments	10 – 40	< 64 mm	< 80	Low		
	12:53:08	657 389.84	6 206 834.15										
MCW-D-ST73_11	12:53:08	657 389.84	6 206 834.15	10	17	MCW-D-ST73_26 to MCW-D-ST73_27	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low		
	12:54:40	657 399.33	6 206 831.09										
MCW-D-ST73_12	12:54:40	657 399.33	6 206 831.09	1	2	MCW-D-ST73_28	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	40 – 95	64 mm – 5 m	< 80	Medium		
	12:54:55	657 400.73	6 206 830.73										
MCW-D-ST73_13	12:54:55	657 400.73	6 206 830.73	16	26	MCW-D-ST73_29 to MCW-D-ST73_34	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low		
	12:57:46	657 415.85	6 206 827.09										
MCW-D-ST73_14	12:57:29	657 415.85	6 206 827.09	6	10	-	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	40 – 95	64 mm – 5 m	< 80	Medium		
	12:58:23	657 421.56	6 206 825.73										
MCW-D-ST73_15	12:58:23	657 421.56	6 206 825.73	15	26	MCW-D-ST73_35 to MCW-D-ST73_39	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low		
	13:00:53	657 436.36	6 206 822.19										
24/10/2023	MCW-D-ST82	MCW-D-ST82_1	10:16:24	656 829.83	6 204 546.11	5	8	MCW-D-ST82_01 to MCW-D-ST82_02	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low
			10:18:40	656 834.43	6 204 545.15								
		MCW-D-ST82_2	10:18:40	656 834.43	6 204 545.15	3	5	MCW-D-ST82_03 to MCW-D-ST82_04	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	40 – 95	64 mm – 5 m	< 80	Medium
			10:19:06	656 837.50	6 204 544.62								
MCW-D-ST82_3	10:19:06	656 837.50	6 204 544.62	22	35	MCW-D-ST82_05 to MCW-D-ST82_14	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	10 – 40	64 mm – 5 m	< 80	Low		
	10:22:33	656 859.63	6 204 543.22										
MCW-D-ST82_3	10:22:33	656 859.63	6 204 543.22	164	262	MCW-D-ST82_15 to MCW-D-ST82_34	Slightly gravelly sand with small scale ripples and shell fragments	< 10	Flat seafloor	< 80	Not a Reef		
	10:50:01	657 023.40	6 204 536.45										
08/09/2023	MCW-A-ST08A	MCW-A-ST08A_1	12:13:57	645 659.51	6 221 867.77	28	33	MCW-A-ST08A_01 to MCW-A-ST08A_09	Coarse sediment including shell hash, sand, gravel, and cobbles with small scale ripples	< 10	Flat seafloor	< 80	Not a Reef
			12:18:23	645 654.36	6 221 840.65								
		MCW-A-ST08A_2	12:18:23	645 654.36	6 221 840.65	37	45	MCW-A-ST08A_10 to MCW-A-ST08A_17	Slightly gravelly sand with small scale ripples, shell fragments and cobbles	< 10	Flat seafloor	< 80	Not a Reef
12:24:23	645 646.98	6 221 803.96											
23/09/2023	MCW-C-ST83	MCW-C-ST83_1	09:33:51	638 745.94	6 201 691.56	3	6	MCW-C-ST083_01 to MCW-C-ST83_03	Sandy gravel, including numerous pebbles, infrequent cobbles and boulders	< 10	< 64 mm	< 80	Not a Reef
			09:35:05	638 747.00	6 201 688.37								
		MCW-C-ST83_2	09:35:05	638 747.00	6 201 688.37	3	4	MCW-C-ST83_04	Sandy gravel with cobbles and infrequent boulders	10 – 40	64 mm – 5 m	< 80	Low
			09:35:30	638 748.46	6 201 686.06								
		MCW-C-ST83_3	09:35:30	638 748.46	6 201 686.06	23	33	MCW-C-ST83_05 to MCW-C-ST83_11	Cobbles and boulders interspersed with sandy gravel	40 – 95	64 mm – 5 m	< 80	Medium
09:39:17	638 762.35	6 201 667.11											
MCW-C-ST83_4	09:39:17	638 762.35	6 201 667.11	1	2	-	Cobbles interspersed with gravelly sand	10 – 40	64 mm – 5 m	< 80	Low		
09:39:29	638 763.11	6 201 666.17											

Geodetic Parameters: ETRS89 / UTM Zone 29N [m]													
Date	Transect	Section Assessment	Time [UTC]	Video Coordinates		Length [m]	Area Observed [m ²]	Still Nos.	Sediment Description	Stony Reef Characteristic			Overall
				Easting [m]	Northing [m]					Composition [% cover cobbles and boulders]	Elevation	Biota [Epibiota % cover]	
23/09/2023	MCW-C-ST83	MCW-C-ST83_5	09:39:29	638 763.11	6 201 666.17	15	21	MCW-C-ST83_12 to MCW-C-ST83_15	Cobbles and boulders interspersed with sandy gravel	40 – 95	64 mm – 5 m	< 80	Medium
			09:41:47	638 771.93	6 201 654.24								
		MCW-C-ST83_6	09:41:47	638 771.93	6 201 654.24	2	3	MCW-C-ST83_16	Cobbles and infrequent boulders interspersed with sandy gravel	10 – 40	64 mm – 5 m	< 80	Low
			09:42:10	638 772.81	6 201 652.40								
		MCW-C-ST83_7	09:42:10	638 772.81	6 201 652.40	1	2	-	Cobbles and boulders interspersed with sandy gravel	40 – 95	64 mm – 5 m	< 80	Medium
			09:42:20	638 773.45	6 201 651.27								
		MCW-C-ST83_8	09:42:20	638 773.45	6 201 651.27	8	12	MCW-C-ST83_17	Cobbles interspersed with gravelly sand	10 – 40	64 mm – 5 m	< 80	Low
			09:43:42	638 778.08	6 201 644.45								
		MCW-C-ST83_9	09:43:42	638 778.08	6 201 644.45	3	7	MCW-C-ST83_18 to MCW-C-ST83_19	Sandy gravel, including numerous pebbles and infrequent cobbles	< 10	< 64 mm	< 80	Not a Reef
09:44:18	638 780.54		6 201 642.14										
23/09/2023	MCW-C-ST91	MCW-C-ST91	07:56:38	638 656.9	6 199 012.8	67	96	MCW-C-ST91_01 to MCW-C-ST91_17	Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments	< 10	Flat seafloor	< 80	Not a Reef
			08:08:43	638 699.7	6 198 961.7								

Notes
UTC = Coordinated Universal Time

H.1.2 Stony Reef SACFOR Abundance

1.1.1.1 Percentage Cover

Section	Start of Section			End of Section		Section length [m]	Approximate area observed [m ²]	Folk Sediment Description	EUNIS Sediment Description	<i>Flustra foliacea</i> (Massive/Turf)	Encrusting Porifera (Crust/Meadow)	<i>Alcyonium digitatum</i> (Massive/Turf)	Faunal Turf (Massive/Turf)
	Time from start of video	Easting	Northing	Easting	Northing					SACFOR	SACFOR	SACFOR	SACFOR
MCW-D-ST73_2	12:42:04	657 323.7	6 206 850.3	657 436.4	6 206 822.2	116.1	196.5	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Mosaic of Atlantic offshore circalittoral coarse sediment (MD32) with Echinoderms and crustose communities on Atlantic circalittoral rock (MC122)	F	P	O	R
MCW-D-ST82_1	10:16:24	656 829.8	6 204 546.1	656 859.6	6 204 543.2	29.9	51.3	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Atlantic offshore circalittoral coarse sediment (MD32)	F	P	R	R
MCW-C-ST83_2	09:33:51	638 747.0	6 201 688.4	638 778.1	6 201 644.5	53.8	76.0	Cobbles and boulders, interspersed with sandy gravel/gravelly sand	Echinoderms and crustose communities on Atlantic circalittoral rock (MC122)	-	P	O	R

Key to SACFOR scale						
Absent	Present	Rare	Occasional	Frequent	Common	Abundant
						Superabundant

1.1.1.2 Density

Section		MCW-D-ST73_2	MCW-D-ST82_1	MCW-C-ST83_2
Start of Section	Easting	657 323.7	656 829.8	638 747.0
	Northing	6 206 850.3	6 204 546.1	6 201 688.4
End of Section	Easting	657 436.4	656 859.6	638 778.1
	Northing	6 206 822.2	6 204 543.2	6 201 644.5
Section length [m]		116.1	29.9	53.8
Approximate area observed [m ²]		200.3	48.5	76.0
Sediment Description		Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Cobbles and boulders, interspersed with sandy gravel/gravelly sand
JNCC Habitat		Offshore circalittoral coarse sediment (SS.SSa.OSa) with Echinoderms and crustose communities on Atlantic circalittoral rock (CR.MCR.EcCr)	Offshore circalittoral coarse sediment (SS.SSa.OSa)	Echinoderms and crustose communities on Atlantic circalittoral rock (CR.MCR.EcCr)
<i>Calliostoma</i> sp. (1 cm - 3 cm)		-	-	R
Caryophylliidae (1 cm - 3 cm)		F	C	F
Actiniaria (3 cm - 15 cm)		-	-	O
Ophiuroidea (3 cm - 15 cm)		S	-	S
Galatheaidea (3 cm - 15 cm)		-	-	O
<i>Munida</i> sp. (3 cm - 15 cm)		O	F	-
Paguroidea (3 cm - 15 cm)		-	-	O
<i>Pagurus prideaux</i> (3 cm - 15 cm)		-	-	O
Pectinidae (3 cm - 15 cm)		R	O	-
<i>Necora puber</i> (3 cm - 15 cm)		O	O	-
<i>Henricia</i> sp. (3 cm - 15 cm)		O	O	-
Asciacea (3 cm - 15 cm)		-	O	O
Osteichthyes (> 15 cm)		C	C	F
<i>Cancer pagurus</i> (> 15 cm)		O	-	F
<i>Echinus esculentus</i> (> 15 cm)		F	C	F
Asteroidea (> 15 cm)		O	F	-
<i>Marthasterias glacialis</i> (> 15 cm)		O	F	-
<i>Asterias rubens</i> (> 15 cm)		F	-	-
<i>Crossaster papposus</i> (> 15 cm)		-	F	F

Section	MCW-D-ST73_2	MCW-D-ST82_1	MCW-C-ST83_2
<i>Luidia ciliaris</i> (> 15 cm)	-	F	F
<i>Lumpenus lampretaeformis</i> (> 15 cm)	O	-	-
Serpulidae (3 cm - 15 cm)	-	P	P
Sessilia (1 cm - 3 cm)	P	-	P
Anomiida (1 cm - 3 cm)	-	-	P

Notes

Where a large number of cryptic signs were observed, but due to the small size of the organism, it was not possible to identify whether the majority were alive, taxa were noted as present to avoid overestimation of density

Key to SACFOR scale

Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant
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H.2 Epifaunal SACFOR Abundance

Geodetic Parameters: ETRS89 UTM Zone 29 N																						
Transect/Section		MCW-A-ST01	MCW-A-ST02	MCW-A-ST03	MCW-A-ST05	MCW-A-ST07A	MCW-A-ST08A		MCW-A-ST12	MCW-A-ST14	MCW-A-ST22	MCW-A-ST34	MCW-A-ST36	MCW-A-ST44A		MCW-A-ST55	MCW-B-ST09A	MCW-B-ST010	MCW-B-ST017A	MCW-B-ST018A	MCW-B-ST019A	
Start of Line/Section	Easting (mE)	641 119.6	643 864.3	646 751.4	638 498.6	643 944.6	645 659.5	645 654.4	636 002.9	640 982.6	630 633.6	633 130.5	638 876.7	630 639.4	630 597.2	633 382.5	650 116.9	652 151.9	649 187.5	651 412.7	654 910.7	
End of Line/Section	Northing (mN)	6 225 432.2	6 225 561.8	6 225 373.9	6 223 011.3	6 223 040.6	6 221 867.8	6 221 840.7	6 220 270.2	6 220 520.5	6 217 717.1	6 215 215.3	6 214 834.3	6 212 685.9	6 212 700.0	6 209 770.4	6 222 911.4	6 222 703.7	6 220 216.9	6 220 771.5	6 219 719.9	
Line/Section	Easting (mE)	641 155.5	643 890.9	646 762.3	638 495.0	643 891.0	645 654.4	645 647.0	636 004.6	640 976.4	630 622.6	633 088.2	638 863.1	630 597.2	630 583.8	633 405.9	650 013.4	652 088.1	649 122.9	651 335.2	654 911.1	
Line/Section	Northing (mN)	6 225 389.5	6 225 512.1	6 225 315.4	6 222 954.4	6 223 017.0	6 221 840.7	6 221 804.0	6 220 206.9	6 220 468.8	6 217 656.5	6 215 176.5	6 214 781.9	6 212 700.0	6 212 704.4	6 209 723.2	6 222 871.7	6 222 619.9	6 220 136.9	6 220 687.3	6 219 834.7	
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Coarse sediment including shell hash, sand, gravel, and cobbles with small scale ripples	Slightly gravelly sand with small scale ripples, shell fragments and cobbles	Slightly gravelly sand with small scale ripples and shell fragments	Sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly muddy sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	
SACFOR	Caryophylliidae (1 cm - 3 cm)						F	F														
	Polychaeta (3 cm - 15 cm)			O														R				
	Echiura (3 cm - 15 cm)																					
	Possible Tunicate (3 cm - 15 cm)																					
	Munida sp. (3 cm - 15 cm)																					
	Actiniaria (3 cm - 15 cm)	O			O						O											
	Anthozoa (3 cm - 15 cm)																					
	Halcompoides sp. (3 cm - 15 cm)																				O	
	Ceriantharia (3 cm - 15 cm)							O													R	
	Hormathiidae (3 cm - 15 cm)										O											
	Calliactis palliata (3 cm - 15 cm)									O	O				O							
	Pectinidae (3 cm - 15 cm)																					
	Gastropoda (3 cm - 15 cm)									O												
	Caridea (3 cm - 15 cm)																					R
	Necora puber (3 cm - 15 cm)																					
	Paguroidea (3 cm - 15 cm)	F	F	F	F	F				F	F	F	F		F	C	F	O	O	F	O	R
	Pagurus prideaux (3 cm - 15 cm)										O	O										
	Henricia sp. (3 cm - 15 cm)																					
	Ophiuroidea (including Ophiothrix fragilis) (> 15 cm)		F	F		F				F								O				
	Ophiura ophiura (> 15 cm)			F																		
	possible Holothuroidea (3 cm - 15 cm)																					
	possible Arctica islandica (3 cm - 15 cm)					O	O													R		
	Cephalopoda (3 cm - 15 cm)												O									
	Loliginidae (3 cm - 15 cm)												F		O					O		
	Sepioida sp. (3 cm - 15 cm)												O		O							
	Ascidacea (3 cm - 15 cm)																					
	Gobiidae (3 cm - 15 cm)									O												O
	Brachyura (3 cm - 15 cm)														O				O			
	Liocarcinus sp. (3 cm - 15 cm)																		R			R
	Osteichthyes (> 15 cm)	F	F	F				F		F		F	F	F			F	C	C	C	C	F
	Possible Ammodytidae (> 15 cm)													F				O	O			
	Gadidae (> 15 cm)											F	F				F	F	C	C	C	
	Clupeidae (> 15 cm)																F	F				
	Triglidae (> 15 cm)																F		O	F		
	Merlangius merlangus (> 15 cm)															F						
Scomber scombrus (> 15 cm)																				C		
Clupea harengus (> 15 cm)																			F	F	F	
Trisopterus sp. (> 15 cm)																						
Callionymus sp. (> 15 cm)	O	O	O				F	F											R		O	
Lumpenus lampretaeformis (> 15 cm)																						
Pleuronectiformes (> 15 cm)									F	F	F			F		F	F	F	F	F	F	
Soleidae (> 15 cm)									F		F	F				F		O	F	F		

Geodetic Parameters: ETRS89 UTM Zone 29 N																				
Transect/Section	MCW-A-ST01	MCW-A-ST02	MCW-A-ST03	MCW-A-ST05	MCW-A-ST07A	MCW-A-ST08A		MCW-A-ST12	MCW-A-ST14	MCW-A-ST22	MCW-A-ST34	MCW-A-ST36	MCW-A-ST44A		MCW-A-ST55	MCW-B-ST09A	MCW-B-ST010	MCW-B-ST017A	MCW-B-ST018A	MCW-B-ST019A
<i>Microchirus variegatus</i> (> 15 cm)																	O		O	
<i>Buglossidium luteum</i> (> 15 cm)										F	F									
<i>Pleuronectes platessa</i> (> 15 cm)																			O	
<i>Limanda limanda</i> (> 15 cm)																				O
Rajiformes (> 15 cm)																				
<i>Raja clavata</i> (> 15 cm)		F																		
<i>Cancer pagurus</i> (> 15 cm)																O				
<i>Echinus esculentus</i> (> 15 cm)																				
Asteroidea (> 15 cm)					F											F	F		O	
<i>Marthasterias glacialis</i> (> 15 cm)																				
<i>Astropecten irregularis</i> (> 15cm)																		O	O	
<i>Asterias rubens</i> (> 15 cm)											F	F								
<i>Crossaster papposus</i> (> 15 cm)																				
<i>Luidia sarsii</i> (> 15 cm)																	O			
<i>Luidia ciliaris</i> (> 15 cm)																				
Blenniidae (3 cm - 15 cm)																				
<i>Atelecyclus rotundatus</i> (3 cm - 15 cm)							O													
<i>Corystes cassivelaunus</i> (3 cm - 15 cm)																				
<i>Calliostoma</i> sp. (1 cm - 3 cm)																				
<i>Urticina</i> sp. (3 cm - 15 cm)																				
Galatheoidea (3 cm - 15 cm)																				
<i>Lanice conchilega</i> (3 cm - 15 cm)																				
<i>Chelidonichthys cuculus</i> (> 15 cm)																				
<i>Agonus cataphractus</i> (> 15 cm)																				
<i>Flustra foliacea</i> (Massive/Turf)							R							R						
Encrusting Porifera (Crust/Meadow)																				
<i>Alcyonium digitatum</i> (Massive/Turf)			R				R				R									
Flustriidae (Massive/Turf)			R					R												
Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)							R				R					R				
Serpulidae (3 cm - 15 cm)								P												
Sessilia (1 cm - 3 cm)																				
Anomiida (1 cm - 3 cm)								P	P											

Key to SACFOR scale							
Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant

Geodetic Parameters: ETRS89 UTM Zone 29 N																								
Transect/Section		MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57			MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31	MCW-C-ST32	MCW_C_ST41		MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70	
Start of Line/Section	Easting (mE)	646 381.0	649 612.9	652 172.8	644 192.7	638 413.9	638 382.7	638 376.8	643 527.5	657 510.3	654 524.4	657 077.1	651 608.4	651 653.3	654 566.3	657 099.2	649 241.1	651 655.7	654 496.4	657 295.1	651 792.6	654 466.3	649 490.5	
	Northing (mN)	6 217 841.8	6 217 240.6	6 217 411.6	6 214 646.5	6 209 784.4	6 209 844.6	6 209 856.8	6 210 197.0	6 219 953.6	6 217 459.8	6 217 652.1	6 215 065.2	6 215 095.2	6 214 919.6	6 215 064.9	6 212 426.3	6 212 473.4	6 212 296.0	6 212 408.4	6 209 616.5	6 209 648.3	6 206 785.2	
End of Line/Section	Easting (mE)	646 298.0	649 492.7	652 112.3	644 087.4	638 382.7	638 376.8	638 364.0	643 420.9	657 467.3	654 515.0	657 082.7	651 653.3	651 725.9	654 608.2	657 112.5	649 206.5	651 603.1	654 508.1	657 296.2	651 816.2	654 524.6	649 541.9	
	Northing (mN)	6 217 783.6	6 217 236.7	6 217 501.2	6 214 668.1	6 209 844.6	6 209 856.8	6 209 882.0	6 210 170.9	6 220 004.7	6 217 522.5	6 217 713.0	6 215 095.2	6 215 148.4	6 214 962.5	6 215 123.3	6 212 376.2	6 212 444.1	6 212 233.7	6 212 350.7	6 209 560.7	6 209 640.5	6 206 757.4	
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments																						
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)																						
SACFOR	Caryophylliidae (1 cm - 3 cm)																							
	Polychaeta (3 cm - 15 cm)			R																			O	O
	Echiura (3 cm - 15 cm)	R																						
	Possible Tunicate (3cm - 15 cm)	R			R																			
	<i>Munida</i> sp. (3 cm - 15 cm)																							
	Actiniaria (3 cm - 15 cm)																							
	Anthozoa (3 cm - 15 cm)																							
	<i>Halcampoides</i> sp. (3 cm - 15 cm)																							
	Ceriantharia (3 cm - 15 cm)																							
	Hormathiidae (3 cm - 15 cm)																							
	<i>Calliactis palliata</i> (3 cm - 15 cm)	O																						
	Pectinidae (3 cm - 15 cm)																							
	Gastropoda (3 cm - 15 cm)																							
	Caridea (3 cm - 15 cm)																							
	<i>Necora puber</i> (3 cm - 15 cm)																							
	Paguroidea (3 cm - 15 cm)	F	O		F	O	O	O	O	O	O			R		O	O	F				O	O	
	<i>Pagurus prideaux</i> (3 cm - 15 cm)	O																						
	<i>Henricia</i> sp. (3 cm - 15 cm)																							
	Ophiuroidea (including <i>Ophiothrix fragilis</i>) (> 15 cm)	O	O													O		F						
	<i>Ophiura ophiura</i> (> 15 cm)	O																						
	possible Holothuroidea (3 cm - 15 cm)																							
	possible <i>Arctica islandica</i> (3 cm - 15 cm)										O													
	Cephalopoda (3 cm - 15 cm)																							
	Loliginidae (3 cm - 15 cm)			R	R									O	O	O		F						
	<i>Sepiola</i> sp. (3 cm - 15 cm)																							
	Ascidacea (3 cm - 15 cm)																							
	Gobiidae (3 cm - 15 cm)	R		O	R																			
	Brachyura (3 cm - 15 cm)													O	O		O			R		O		O
	<i>Liocarcinus</i> sp. (3 cm - 15 cm)	R																						
	Osteichthyes (> 15 cm)	O	C	C	F	F				F	F		C	F	C	F	F	F			F	F	F	
	Possible Ammodytidae (> 15 cm)		F	O		F																		
	Gadidae (> 15 cm)		C	C		F	C	C					F		F								F	
	Clupeidae (> 15 cm)																							
	Triglidae (> 15 cm)	O														O							F	
	<i>Merlangius merlangus</i> (> 15 cm)				O																			
<i>Scamber scombrus</i> (> 15 cm)		C	F		F							F												
<i>Clupea harengus</i> (> 15 cm)					F																			
<i>Trisopterus</i> sp. (> 15 cm)				F																				
<i>Callionymus</i> sp. (> 15 cm)	O		R	O	F		F		O		O		R			O					O			
<i>Lumpenus lampraeiformis</i> (> 15 cm)																								
Pleuronectiformes (> 15 cm)	O		F										F	F	F	F			O		F	F		
Soleidae (> 15 cm)			O								F			O										
<i>Microchirus variegatus</i> (> 15 cm)																		F						

Geodetic Parameters: ETRS89 UTM Zone 29 N																						
Transect/Section	MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57			MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31	MCW-C-ST32	MCW_C_ST41		MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70
Buglossidium luteum (> 15 cm)																						
Pleuronectes platessa (> 15 cm)																	F					
Limanda limanda (> 15 cm)																						
Rajiformes (> 15 cm)																	F					
Raja clavata (> 15 cm)																						
Cancer pagurus (> 15 cm)		O													F							
Echinus esculentus (> 15 cm)																						
Asteroidea (> 15 cm)	O	F	O																			
Marthasterias glacialis (> 15 cm)																						
Astropecten irregularis (> 15 cm)			O	O					F						F		F				F	
Asterias rubens (> 15 cm)																	F					
Crossaster papposus (> 15 cm)																						
Luidia sarsii (> 15 cm)		O	O																			
Luidia ciliaris (> 15 cm)										O												
Blenniidae (3 cm - 15 cm)																						
Atelecyclus rotundatus (3 cm - 15 cm)																						O
Corystes cassivelaunus (3 cm - 15 cm)						O																
Calliostoma sp. (1 cm - 3 cm)																						
Urticina sp. (3 cm - 15 cm)																						
Galatheoidea (3 cm - 15 cm)																						
Lanice conchilega (3 cm - 15 cm)																						
Chelidonichthys cuculus (> 15 cm)																	F				F	
Agonus cataphractus (> 15 cm)																	F				F	
Flustra foliacea (Massive/Turf)	R																					
Encrusting Porifera (Crust/Meadow)																						
Alcyonium digitatum (Massive/Turf)																						
Flustridae (Massive/Turf)				R																		
Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)									R			R									R	R
Serpulidae (3 cm - 15 cm)																						
Sessilia (1 cm - 3 cm)																						
Anomiida (1 cm - 3 cm)																						

Key to SACFOR scale							
Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant

Geodetic Parameters: ETRS89 UTM Zone 29 N																						
Transect/Section		MCW-C-ST71	MCW-C-ST75	MCW-C-ST77	MCW-C-ST79	MCW-C-ST83			MCW-C-ST91	MCW-C-ST92	MCW-D-ST64	MCW-D-ST72A	MCW-D-ST73		MCW-D-ST80	MCW-D-ST81	MCW-D-ST82		MCW-D-ST86A	MCW-D-ST88A	MCW-D-ST89A	
Start of Line/Section	Easting (mE)	651 617.7	638 730.6	644 161.0	649 121.6	638745.9	638747.0	638778.1	638 656.9	641 227.4	656 999.0	654 858.6	657 309.5	657 323.7	651 951.8	654 425.1	656 829.8	656 859.6	647 290.6	651 487.2	654 049.2	
	Northing (mN)	6 207 254.9	6 204 211.3	6 204 241.8	6 204 505.9	6201691.6	6201688.4	6201644.5	6 199 012.8	6 199 153.9	6 209 828.9	6 206 718.1	6 206 853.3	6 206 850.3	6 204 318.1	6 204 405.4	6 204 546.1	6 204 543.2	6 201 713.4	6 201 952.9	6 202 156.0	
End of Line/Section	Easting (mE)	651 599.1	638 707.4	644 126.4	649 108.3	638747.0	638778.1	638780.5	638 699.7	641 258.7	656 971.0	654 815.2	657 323.7	657 436.4	652 043.0	654 400.9	656 859.6	657 023.4	647 381.2	651 595.3	654 137.0	
	Northing (mN)	6 207 192.7	6 204 262.7	6 204 198.7	6 204 449.6	6201688.4	6201644.5	6201642.1	6 198 961.7	6 199 198.1	6 209 724.2	6 206 616.1	6 206 850.3	6 206 822.2	6 204 251.7	6 204 296.4	6 204 543.2	6 204 536.5	6 201 645.4	6 201 934.8	6 202 095.2	
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Sandy gravel, including numerous pebbles, infrequent cobbles and boulders	Cobbles and boulders, interspersed with sandy gravel/gravelly sand	Sandy gravel, including numerous pebbles and infrequent cobbles	Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Echinoderms and crustose communities (CR.MCR.EcCr)	Echinoderms and crustose communities (CR.MCR.EcCr)	Echinoderms and crustose communities (CR.MCR.EcCr)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Mosaic of Offshore circalittoral coarse sediment (SS.SCS.OCS) with Echinoderms and crustose communities (CR.MCR.EcCr)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	
SACFOR	Caryophylliidae (1 cm - 3 cm)						F							F			C					
	Polychaeta (3 cm - 15 cm)																					
	Echiura (3 cm - 15 cm)																					
	Possible Tunicate (3cm - 15 cm)																					
	Munida sp. (3 cm - 15 cm)													O				F				
	Actiniaria (3 cm - 15 cm)							O		O												
	Anthozoa (3 cm - 15 cm)																					
	Halcampoides sp. (3 cm - 15 cm)																					
	Ceriantharia (3 cm - 15 cm)																					
	Hormathiidae (3 cm - 15 cm)																					
	Calliactis palliata (3 cm - 15 cm)							O														
	Pectinidae (3 cm - 15 cm)													R			O	R				
	Gastropoda (3 cm - 15 cm)																					
	Caridea (3 cm - 15 cm)											R										
	Necora puber (3 cm - 15 cm)													O			O					
	Paguroidea (3 cm - 15 cm)	O	O	O				O			F	O			R				R	R		
	Pagurus prideaux (3 cm - 15 cm)							O														
	Henricia sp. (3 cm - 15 cm)														O		O					
	Ophiuroidea (including Ophiothrix fragilis) (> 15 cm)						A	S	A	F				A	S	O						O
	Ophiura ophiura (> 15 cm)																					
	possible Holothuroidea (3 cm - 15 cm)																					
	possible Arctica islandica (3 cm - 15 cm)				O																	
	Cephalopoda (3 cm - 15 cm)																					
	Loliginidae (3 cm - 15 cm)											R				R					R	
	Sepiella sp. (3 cm - 15 cm)																					
	Asciacea (3 cm - 15 cm)							O		O							O					
	Gobiidae (3 cm - 15 cm)											R										
	Brachyura (3 cm - 15 cm)				O							R						R				R
	Liocarcinus sp. (3 cm - 15 cm)										R											
	Osteichthyes (> 15 cm)						C	F				F	F		C	C	F	C	O	C	F	
	Possible Ammodytidae (> 15 cm)														O					O		
	Gadidae (> 15cm)			F												F						
	Clupeidae (> 15 cm)																					
Triglidae (> 15 cm)																						
Merlangius merlangus (> 15 cm)																						
Scomber scombrus (> 15 cm)										F					F				C			
Clupea harengus (> 15 cm)																						
Trisopterus sp. (> 15 cm)			F																			
Callionymus sp. (> 15 cm)	O													R	O		O			R		
Lumpenus lampretaeformis (> 15 cm)														O								
Pleuronectiformes (> 15 cm)	F	F									F					F			O			
Soleidae (> 15 cm)			C																			



Geodetic Parameters: ETRS89 UTM Zone 29 N

Transect/Section		MCW-C-ST71	MCW-C-ST75	MCW-C-ST77	MCW-C-ST79	MCW-C-ST83		MCW-C-ST91	MCW-C-ST92	MCW-D-ST64	MCW-D-ST72A	MCW-D-ST73		MCW-D-ST80	MCW-D-ST81	MCW-D-ST82		MCW-D-ST86A	MCW-D-ST88A	MCW-D-ST89A	
	<i>Microchirus variegatus</i> (> 15 cm)																				
	<i>Buglossidium luteum</i> (> 15 cm)																				
	<i>Pleuronectes platessa</i> (> 15 cm)				F																
	<i>Limanda limanda</i> (> 15 cm)																				
	Rajiformes (> 15 cm)																			O	
	<i>Raja clavata</i> (> 15 cm)																				
	<i>Cancer pagurus</i> (> 15 cm)					F							O								
	<i>Echinus esculentus</i> (> 15 cm)					F		F					F				C				
	Asteroidea (> 15 cm)												O				F				
	<i>Marthasterias glacialis</i> (> 15 cm)												O				F				
	<i>Astropecten irregularis</i> (> 15cm)								F												
	<i>Asterias rubens</i> (> 15 cm)	F											F								
	<i>Crossaster papposus</i> (> 15 cm)					F											F				
	<i>Luidia sarsii</i> (> 15 cm)													O							
	<i>Luidia ciliaris</i> (> 15 cm)					F	C										F				
	Blenniidae (3 cm - 15 cm)																O				
	<i>Atelecyclus rotundatus</i> (3 cm - 15 cm)		O																		
	<i>Corystes cassivelaunus</i> (3 cm - 15 cm)																				R
	<i>Calliostoma</i> sp. (1 cm - 3 cm)					R		R													
	<i>Urticina</i> sp. (3 cm - 15 cm)							O													
	Galatheaidea (3 cm - 15 cm)					O															
	<i>Lanice conchilega</i> (3 cm - 15 cm)							O													
	<i>Chelidonichthys cuculus</i> (> 15 cm)		F											O				F	O		
	<i>Agonus cataphractus</i> (> 15 cm)				F																
	<i>Flustra foliacea</i> (Massive/Turf)							R			R		F		R		F				
	Encrusting Porifera (Crust/Meadow)					P		P					P				P				
	<i>Alcyonium digitatum</i> (Massive/Turf)					O		R					R		R		R				
	Flustridae (Massive/Turf)																		R		
	Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)	R				R				R	R		R		R	R	R	R	R	R	R
	Serpulidae (3 cm - 15 cm)					P	P	P	P												
	Sessilia (1 cm - 3 cm)							P													
	Anomiida (1 cm - 3 cm)							P													

Key to SACFOR scale							
Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant

Geodetic Parameters: ETRS89 UTM Zone 29 N							
Transect/Section		MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST101	MCW-D-ST103A	MCW-D-ST104	MCW-D-ST108A
Start of Line/Section	Easting (mE)	649 709.9	645 937.4	649 523.0	641 624.2	643 705.4	646 195.7
	Northing (mN)	6 198 504.3	6 197 289.8	6 196 386.5	6 193 696.8	6 193 487.0	6 191 655.0
End of Line/Section	Easting (mE)	649 709.9	645 908.0	649 627.8	641 705.5	643 769.5	646 252.1
	Northing (mN)	6 198 396.5	6 197 174.2	6 196 368.1	6 193 616.9	6 193 392.5	6 191 564.7
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments	Gravelly sand with small scale ripples and shell fragments	Gravelly sand with small scale ripples and shell fragments sporadic pebbles and cobbles	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragment sporadic cobbles and a boulder	Gravel with shell fragments, cobbles and infrequent boulders
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
SACFOR	Caryophylliidae (1 cm - 3 cm)						
	Polychaeta (3 cm - 15 cm)						
	Echiura (3 cm - 15 cm)						
	Possible Tunicate (3cm - 15 cm)						
	<i>Munida</i> sp. (3 cm - 15 cm)						
	Actiniaria (3 cm - 15 cm)						
	Anthozoa (3 cm - 15 cm)						
	<i>Halcamptoides</i> sp. (3 cm - 15 cm)						
	Ceriantharia (3 cm - 15 cm)						
	Hormathiidae (3 cm - 15 cm)						
	<i>Calliactis palliata</i> (3 cm - 15 cm)						
	Pectinidae (3 cm - 15 cm)						
	Gastropoda (3 cm - 15 cm)						
	Caridea (3 cm - 15 cm)						
	<i>Necora puber</i> (3 cm - 15 cm)						
	Paguroidea (3 cm - 15 cm)		R	R	O		R
	<i>Pagurus prideaux</i> (3 cm - 15 cm)						
	<i>Henricia</i> sp. (3 cm - 15 cm)						
	Ophiuroidea (including <i>Ophiothrix fragilis</i>) (> 15 cm)						O
	<i>Ophiura ophiura</i> (> 15 cm)						
	possible Holothuroidea (3 cm - 15 cm)						
	possible <i>Arctica islandica</i> (3 cm - 15 cm)						
	Cephalopoda (3 cm - 15 cm)						
	Loliginidae (3 cm - 15 cm)		R				
	<i>Sepiola</i> sp. (3 cm - 15 cm)						
	Asciacea (3 cm - 15 cm)						R
	Gobiidae (3 cm - 15 cm)						
	Brachyura (3 cm - 15 cm)	O	O	O	O	O	R
	<i>Liocarcinus</i> sp. (3 cm - 15 cm)						
	Osteichthyes (> 15 cm)		F		F		
	Possible Ammodytidae (> 15 cm)						
	Gadidae (> 15cm)						
	Clupeidae (> 15 cm)						
	Triglidae (> 15 cm)						
	<i>Merlangius merlangus</i> (> 15 cm)						
	<i>Scomber scombrus</i> (> 15 cm)						
	<i>Clupea harengus</i> (> 15 cm)						
	<i>Trisopterus</i> sp. (> 15 cm)						
	<i>Callionymus</i> sp. (> 15 cm)			O			
	<i>Lumpenus lampreaeformis</i> (> 15 cm)						
	Pleuronectiformes (> 15 cm)		O			F	
	Soleidae (> 15 cm)						
	<i>Microchirus variegatus</i> (> 15 cm)						
	<i>Buglossidium luteum</i> (> 15 cm)						
	<i>Pleuronectes platessa</i> (> 15 cm)						
	<i>Limanda limanda</i> (> 15 cm)						
	Rajiformes (> 15 cm)						
	<i>Raja clavata</i> (> 15 cm)						
	<i>Cancer pagurus</i> (> 15 cm)						
	<i>Echinus esculentus</i> (> 15 cm)						
Asteroidea (> 15 cm)						O	
<i>Marthasterias glacialis</i> (> 15 cm)							
<i>Astropecten irregularis</i> (> 15cm)							

Geodetic Parameters: ETRS89 UTM Zone 29 N

Transect/Section	MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST101	MCW-D-ST103A	MCW-D-ST104	MCW-D-ST108A
Asterias rubens (> 15 cm)						
Crossaster papposus (> 15 cm)						
Luidia sarsii (> 15 cm)						
Luidia ciliaris (> 15 cm)						
Blenniidae (3 cm - 15 cm)						
Atelecyclus rotundatus (3 cm - 15 cm)						
Corystes cassivelaunus (3 cm - 15 cm)						
Calliostoma sp. (1 cm - 3 cm)						
Urticina sp. (3 cm - 15 cm)						
Galatheaidea (3 cm - 15 cm)						R
Lanice conchilega (3 cm - 15 cm)						
Serpulidae (3 cm - 15 cm)						
Chelidonichthys cuculus (> 15 cm)		O				
Agonus cataphractus (> 15 cm)		O				
Flustra foliacea (Massive/Turf)						
Encrusting Porifera (Crust/Meadow)						P
Alcyonium digitatum (Massive/Turf)						
Flustridae (Massive/Turf)				R		R
Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)					R	
Serpulidae (3 cm - 15 cm)						
Sessilia (1 cm - 3 cm)						
Anomiida (1 cm - 3 cm)						P

Key to SACFOR scale

Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant
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Geodetic Parameters: ETRS89 UTM Zone 29 N

Transect/Section	MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57			MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31	MCW-C-ST32	MCW_C_ST41		MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70	
Start of Line/Section	Easting (mE)	646 381.0	649 612.9	652 172.8	644 192.7	638 413.9	638 382.7	638 376.8	643 527.5	657 510.3	654 524.4	657 077.1	651 608.4	651 653.3	654 566.3	657 099.2	649 241.1	651 655.7	654 496.4	657 295.1	651 792.6	654 466.3	649 490.5
	Northing (mN)	6 217 841.8	6 217 240.6	6 217 411.6	6 214 646.5	6 209 784.4	6 209 844.6	6 209 856.8	6 210 197.0	6 219 953.6	6 217 459.8	6 217 652.1	6 215 065.2	6 215 095.2	6 214 919.6	6 215 064.9	6 212 426.3	6 212 473.4	6 212 296.0	6 212 408.4	6 209 616.5	6 209 648.3	6 206 785.2
End of Line/Section	Easting (mE)	646 298.0	649 492.7	652 112.3	644 087.4	638 382.7	638 376.8	638 364.0	643 420.9	657 467.3	654 515.0	657 082.7	651 653.3	651 725.9	654 608.2	657 112.5	649 206.5	651 603.1	654 508.1	657 296.2	651 816.2	654 524.6	649 541.9
	Northing (mN)	6 217 783.6	6 217 236.7	6 217 501.2	6 214 668.1	6 209 844.6	6 209 856.8	6 209 882.0	6 210 170.9	6 220 004.7	6 217 522.5	6 217 713.0	6 215 095.2	6 215 148.4	6 214 962.5	6 215 123.3	6 212 376.2	6 212 444.1	6 212 233.7	6 212 350.7	6 209 560.7	6 209 640.5	6 206 757.4

Sediment Description	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Gravelly sand with shell fragments	Sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments and sporadic cobbles	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments
JNCC Habitat	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)
Caryophylliidae (1 cm - 3 cm)																							
Polychaeta (3 cm - 15 cm)			R																			O	O
Echiura (3 cm - 15 cm)	R																						
Possible Tunicate (3cm - 15 cm)	R			R																			
Munida sp. (3 cm - 15 cm)																							
Actinaria (3 cm - 15 cm)																							
Anthozoa (3 cm - 15 cm)																							
Halcampoides sp. (3 cm - 15 cm)																							
Ceriantharia (3 cm - 15 cm)																							
Hormathiidae (3 cm - 15 cm)																							
Calliactis palliata (3 cm - 15 cm)	O																						
Pectinidae (3 cm - 15 cm)																							
Gastropoda (3 cm - 15 cm)																							
Caridea (3 cm - 15 cm)																							
Necora puber (3 cm - 15 cm)																							
Paguroidea (3 cm - 15 cm)	F	O		F	O	O	O	O	O	O			R		O	O	F			O	O		
Pagurus prideaux (3 cm - 15 cm)	O																						
Henricia sp. (3 cm - 15 cm)																							
Ophiuroidea (including Ophiothrix fragilis) (> 15 cm)	O	O													O		F						

Geodetic Parameters: ETRS89 UTM Zone 29 N																							
Transect/Section	MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57			MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31	MCW-C-ST32	MCW_C-ST41		MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70	
<i>Ophiura ophiura</i> (> 15 cm)	O																						
possible Holothuroidea (3 cm - 15 cm)																							
possible <i>Arctica islandica</i> (3 cm - 15 cm)								O															
Cephalopoda (3 cm - 15 cm)																							
Loliginidae (3 cm - 15 cm)			R	R								O	O	O		F							
<i>Sepiola</i> sp. (3 cm - 15 cm)																							
Ascidacea (3 cm - 15 cm)																							
Gobiidae (3 cm - 15 cm)	R		O	R																			
Brachyura (3 cm - 15 cm)												O	O			O		R		O		O	
<i>Liocarcinus</i> sp. (3 cm - 15 cm)	R																						
Osteichthyes (> 15 cm)	O	C	C	F	F			F	F		C	F	C	F	F	F				F	F	F	
Possible Ammodytidae (> 15 cm)		F	O		F																		
Gadidae (> 15cm)		C	C		F	C	C				F		F										F
Clupeidae (> 15 cm)																							
Triglidae (> 15 cm)	O													O									F
<i>Merlangius merlangus</i> (> 15 cm)			O																				
<i>Scomber scombrus</i> (> 15 cm)		C	F		F						F												
<i>Clupea harengus</i> (> 15 cm)					F																		
<i>Trisopterus</i> sp. (> 15 cm)			F																				
<i>Callionymus</i> sp. (> 15 cm)	O		R	O	F		F		O		O		R			O					O		
<i>Lumpenus lampraeiformis</i> (> 15 cm)																							
Pleuronectiformes (> 15 cm)	O		F										F	F	F	F		O			F	F	
Soleidae (> 15 cm)		O								F			O										
<i>Microchirus variegatus</i> (> 15 cm)																							F
<i>Buglossidium luteum</i> (> 15 cm)																							
<i>Pleuronectes platessa</i> (> 15 cm)																							F
<i>Limanda limanda</i> (> 15 cm)																							
Rajiformes (> 15 cm)																							F
<i>Raja clavata</i> (> 15 cm)																							
<i>Cancer pagurus</i> (> 15 cm)		O														F							
<i>Echinus esculentus</i> (> 15 cm)																							
Asteroidea (> 15 cm)	O	F	O																				
<i>Marthasterias glacialis</i> (> 15 cm)																							
<i>Astropecten irregularis</i> (> 15cm)			O	O						F					F		F						F
<i>Asterias rubens</i> (> 15 cm)																					F		
<i>Crossaster papposus</i> (> 15 cm)																							
<i>Luidia sarsii</i> (> 15 cm)		O	O																				
<i>Luidia ciliaris</i> (> 15 cm)												O											
Blenniidae (3 cm - 15 cm)																							
<i>Atelecyclus rotundatus</i> (3 cm - 15 cm)																							O
<i>Corystes cassivelaunus</i> (3 cm - 15 cm)					O																		
<i>Calliostoma</i> sp. (1 cm - 3 cm)																							
<i>Urticina</i> sp. (3 cm - 15 cm)																							
Galatheoidea (3 cm - 15 cm)																							
<i>Lanice conchilega</i> (3 cm - 15 cm)																							
<i>Chelidonichthys cuculus</i> (> 15 cm)																	F				F		
<i>Agonus cataphractus</i> (> 15 cm)																	F				F		
<i>Flustra foliacea</i> (Massive/Turf)	R																						
Encrusting Porifera (Crust/Meadow)																							

Geodetic Parameters: ETRS89 UTM Zone 29 N																								
Transect/Section		MCW-B-ST28	MCW-B-ST29A	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57			MCW-B-ST59A	MCW-C-ST20	MCW-C-ST31	MCW-C-ST32	MCW_C-ST41		MCW-C-ST42	MCW-C-ST43	MCW-C-ST51	MCW-C-ST52	MCW-C-ST53	MCW-C-ST54	MCW-C-ST62	MCW-C-ST63	MCW-C-ST70	
	<i>Alcyonium digitatum</i> (Massive/Turf)																							
	Flustridae (Massive/Turf)				R																			
	Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)										R			R									R	R
	Serpulidae (3 cm - 15 cm)																							
	Sessilia (1 cm - 3 cm)																							
	Anomiida (1 cm - 3 cm)																							
Key to SACFOR scale																								
Absent		Present			Rare			Occasional			Frequent			Common			Abundant			Superabundant				

Geodetic Parameters: ETRS89 UTM Zone 29 N																							
Transect/Section		MCW-C-ST71	MCW-C-ST75	MCW-C-ST77	MCW-C-ST79	MCW-C-ST83			MCW-C-ST91	MCW-C-ST92	MCW-D-ST64	MCW-D-ST72A	MCW-D-ST73		MCW-D-ST80	MCW-D-ST81	MCW-D-ST82		MCW-D-ST86A	MCW-D-ST88A	MCW-D-ST89A		
Start of Line/Section	Easting (mE)	651 617.7	638 730.6	644 161.0	649 121.6	638745.9	638747.0	638778.1	638 656.9	641 227.4	656 999.0	654 858.6	657 309.5	657 323.7	651 951.8	654 425.1	656 829.8	656 859.6	647 290.6	651 487.2	654 049.2		
	Northing (mN)	6 207 254.9	6 204 211.3	6 204 241.8	6 204 505.9	6201691.6	6201688.4	6201644.5	6 199 012.8	6 199 153.9	6 209 828.9	6 206 718.1	6 206 853.3	6 206 850.3	6 204 318.1	6 204 405.4	6 204 546.1	6 204 543.2	6 201 713.4	6 201 952.9	6 202 156.0		
End of Line/Section	Easting (mE)	651 599.1	638 707.4	644 126.4	649 108.3	638747.0	638778.1	638780.5	638 699.7	641 258.7	656 971.0	654 815.2	657 323.7	657 436.4	652 043.0	654 400.9	656 859.6	657 023.4	647 381.2	651 595.3	654 137.0		
	Northing (mN)	6 207 192.7	6 204 262.7	6 204 198.7	6 204 449.6	6201688.4	6201644.5	6201642.1	6 198 961.7	6 199 198.1	6 209 724.2	6 206 616.1	6 206 850.3	6 206 822.2	6 204 251.7	6 204 296.4	6 204 543.2	6 204 536.5	6 201 645.4	6 201 934.8	6 202 095.2		
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Sandy gravel, including numerous pebbles, infrequent cobbles and boulders	Cobbles and boulders, interspersed with sandy gravel/gravelly sand	Sandy gravel, including numerous pebbles and infrequent cobbles	Coarse sediment with cobbles, interspersed with sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Cobbles and boulders interspersed with slightly gravelly sand and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragments		
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Echinoderms and crustose communities (CR.MCR.EcCr)	Echinoderms and crustose communities (CR.MCR.EcCr)	Echinoderms and crustose communities (CR.MCR.EcCr)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Mosaic of Offshore circalittoral coarse sediment (SS.SCS.OCS) with Echinoderms and crustose communities (CR.MCR.EcCr)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)		
SACFOR	Caryophylliidae (1 cm - 3 cm)						F							F			C						
	Polychaeta (3 cm - 15 cm)																						
	Echiura (3 cm - 15 cm)																						
	Possible Tunicate (3cm - 15 cm)																						
	Munida sp. (3 cm - 15 cm)														O			F					
	Actiniaria (3 cm - 15 cm)							O		O													
	Anthozoa (3 cm - 15 cm)																						
	Halcampoides sp. (3 cm - 15 cm)																						
	Ceriantharia (3 cm - 15 cm)																						
	Hormathiidae (3 cm - 15 cm)																						
	Calliactis palliata (3 cm - 15 cm)							O															
	Pectinidae (3 cm - 15 cm)														R			O	R				
	Gastropoda (3 cm - 15 cm)																						
	Caridea (3 cm - 15 cm)												R										
	Necora puber (3 cm - 15 cm)														O			O					
	Paguroidea (3 cm - 15 cm)	O	O	O				O				F	O			R				R	R		
	Pagurus prideaux (3 cm - 15 cm)							O															
	Henricia sp. (3 cm - 15 cm)														O			O					
	Ophiuroidea (including Ophiothrix fragilis) (> 15 cm)						A	S	A	F				A	S	O						O	
	Ophiura ophiura (> 15 cm)																						
	possible Holothuroidea (3 cm - 15 cm)																						
	possible Arctica islandica (3 cm - 15 cm)					O																	
	Cephalopoda (3 cm - 15 cm)																						
	Loliginidae (3 cm - 15 cm)												R			R						R	
	Sepiella sp. (3 cm - 15 cm)																						
	Asciacea (3 cm - 15 cm)							O		O								O					
	Gobiidae (3 cm - 15 cm)												R										
	Brachyura (3 cm - 15 cm)				O								R						R			R	
	Liocarcinus sp. (3 cm - 15 cm)											R											
	Osteichthyes (> 15 cm)						C	F					F	F			C	C	F	C	O	C	F
	Possible Ammodytidae (> 15 cm)															O					O		
	Gadidae (> 15cm)			F													F						
Clupeidae (> 15 cm)																							
Triglidae (> 15 cm)																							
Merlangius merlangus (> 15 cm)																							
Scomber scombrus (> 15 cm)											F				F				C				
Clupea harengus (> 15 cm)																							
Trisopterus sp. (> 15 cm)			F																				
Callionymus sp. (> 15 cm)	O														R	O		O			R		
Lumpenus lampretaeformis (> 15 cm)															O								
Pleuronectiformes (> 15 cm)	F	F										F					F			O			
Soleidae (> 15 cm)			C																				

Geodetic Parameters: ETRS89 UTM Zone 29 N

Transect/Section	MCW-C-ST71	MCW-C-ST75	MCW-C-ST77	MCW-C-ST79	MCW-C-ST83		MCW-C-ST91	MCW-C-ST92	MCW-D-ST64	MCW-D-ST72A	MCW-D-ST73		MCW-D-ST80	MCW-D-ST81	MCW-D-ST82		MCW-D-ST86A	MCW-D-ST88A	MCW-D-ST89A	
<i>Microchirus variegatus</i> (> 15 cm)																				
<i>Buglossidium luteum</i> (> 15 cm)																				
<i>Pleuronectes platessa</i> (> 15 cm)				F																
<i>Limanda limanda</i> (> 15 cm)																				
Rajiformes (> 15 cm)																			O	
<i>Raja clavata</i> (> 15 cm)																				
<i>Cancer pagurus</i> (> 15 cm)						F						O								
<i>Echinus esculentus</i> (> 15 cm)						F		F				F				C				
Asteroidea (> 15 cm)												O				F				
<i>Marthasterias glacialis</i> (> 15 cm)												O				F				
<i>Astropecten irregularis</i> (> 15cm)									F											
<i>Asterias rubens</i> (> 15 cm)	F											F								
<i>Crossaster papposus</i> (> 15 cm)							F										F			
<i>Luidia sarsii</i> (> 15 cm)													O							
<i>Luidia ciliaris</i> (> 15 cm)						F	C									F				
Blenniidae (3 cm - 15 cm)																O				
<i>Atelecyclus rotundatus</i> (3 cm - 15 cm)		O																		
<i>Corystes cassivelaunus</i> (3 cm - 15 cm)																				R
<i>Calliostoma</i> sp. (1 cm - 3 cm)						R		R												
<i>Urticina</i> sp. (3 cm - 15 cm)								O												
Galatheaidea (3 cm - 15 cm)						O														
<i>Lanice conchilega</i> (3 cm - 15 cm)								O												
<i>Chelidonichthys cuculus</i> (> 15 cm)		F											O				F		O	
<i>Agonus cataphractus</i> (> 15 cm)				F																
<i>Flustra foliacea</i> (Massive/Turf)								R		R		F		R		F				
Encrusting Porifera (Crust/Meadow)						P		P				P				P				
<i>Alcyonium digitatum</i> (Massive/Turf)						O		R				R		R		R				
Flustridae (Massive/Turf)																R				
Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)	R					R			R	R				R			R		R	
Serpulidae (3 cm - 15 cm)						P	P	P	P											
Sessilia (1 cm - 3 cm)							P													
Anomiida (1 cm - 3 cm)							P													

Kay to SACFOR scale	
Absent	Present
	Rare
	Occasional
	Frequent
	Common
	Abundant
	Superabundant

Geodetic Parameters: ETRS89 UTM Zone 29 N							
Transect/Section		MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST101	MCW-D-ST103A	MCW-D-ST104	MCW-D-ST108A
Start of Line/Section	Easting (mE)	649 709.9	645 937.4	649 523.0	641 624.2	643 705.4	646 195.7
	Northing (mN)	6 198 504.3	6 197 289.8	6 196 386.5	6 193 696.8	6 193 487.0	6 191 655.0
End of Line/Section	Easting (mE)	649 709.9	645 908.0	649 627.8	641 705.5	643 769.5	646 252.1
	Northing (mN)	6 198 396.5	6 197 174.2	6 196 368.1	6 193 616.9	6 193 392.5	6 191 564.7
Sediment Description		Slightly gravelly sand with small scale ripples and shell fragments	Gravelly sand with small scale ripples and shell fragments	Gravelly sand with small scale ripples and shell fragments sporadic pebbles and cobbles	Slightly gravelly sand with small scale ripples and shell fragments	Slightly gravelly sand with small scale ripples and shell fragment sporadic cobbles and a boulder	Gravel with shell fragments, cobbles and infrequent boulders
JNCC Habitat		Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral sand (SS.SSa.OSa)	Offshore circalittoral coarse sediment (SS.SCS.OCS)
SACFOR	Caryophylliidae (1 cm - 3 cm)						
	Polychaeta (3 cm - 15 cm)						
	Echiura (3 cm - 15 cm)						
	Possible Tunicate (3cm - 15 cm)						
	<i>Munida</i> sp. (3 cm - 15 cm)						
	Actiniaria (3 cm - 15 cm)						
	Anthozoa (3 cm - 15 cm)						
	<i>Halcampoides</i> sp. (3 cm - 15 cm)						
	Ceriantharia (3 cm - 15 cm)						
	Hormathiidae (3 cm - 15 cm)						
	<i>Calliactis palliata</i> (3 cm - 15 cm)						
	Pectinidae (3 cm - 15 cm)						
	Gastropoda (3 cm - 15 cm)						
	Caridea (3 cm - 15 cm)						
	<i>Necora puber</i> (3 cm - 15 cm)						
	Paguroidea (3 cm - 15 cm)		R	R	O		R
	<i>Pagurus prideaux</i> (3 cm - 15 cm)						
	<i>Henricia</i> sp. (3 cm - 15 cm)						
	Ophiuroidea (including <i>Ophiothrix fragilis</i>) (> 15 cm)						O
	<i>Ophiura ophiura</i> (> 15 cm)						
	possible Holothuroidea (3 cm - 15 cm)						
	possible <i>Arctica islandica</i> (3 cm - 15 cm)						
	Cephalopoda (3 cm - 15 cm)						
	Loliginidae (3 cm - 15 cm)		R				
	<i>Sepiola</i> sp. (3 cm - 15 cm)						
	Asciacea (3 cm - 15 cm)						R
	Gobiidae (3 cm - 15 cm)						
	Brachyura (3 cm - 15 cm)	O	O	O	O	O	R
	<i>Liocarcinus</i> sp. (3 cm - 15 cm)						
	Osteichthyes (> 15 cm)		F		F		
	Possible Ammodytidae (> 15 cm)						
	Gadidae (> 15cm)						
	Clupeidae (> 15 cm)						
	Triglidae (> 15 cm)						
	<i>Merlangius merlangus</i> (> 15 cm)						
	<i>Scomber scombrus</i> (> 15 cm)						
	<i>Clupea harengus</i> (> 15 cm)						
	<i>Trisopterus</i> sp. (> 15 cm)						
	<i>Callionymus</i> sp. (> 15 cm)				O		
	<i>Lumpenus lampreaeformis</i> (> 15 cm)						
	Pleuronectiformes (> 15 cm)		O			F	
	Soleidae (> 15 cm)						
	<i>Microchirus variegatus</i> (> 15 cm)						
	<i>Buglossidium luteum</i> (> 15 cm)						
	<i>Pleuronectes platessa</i> (> 15 cm)						
	<i>Limanda limanda</i> (> 15 cm)						
	Rajiformes (> 15 cm)						
<i>Raja clavata</i> (> 15 cm)							
<i>Cancer pagurus</i> (> 15 cm)							
<i>Echinus esculentus</i> (> 15 cm)							
Asteroidea (> 15 cm)						O	
<i>Marthasterias glacialis</i> (> 15 cm)							
<i>Astropecten irregularis</i> (> 15cm)							

Geodetic Parameters: ETRS89 UTM Zone 29 N						
Transect/Section	MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST101	MCW-D-ST103A	MCW-D-ST104	MCW-D-ST108A
Asterias rubens (> 15 cm)						
Crossaster papposus (> 15 cm)						
Luidia sarsii (> 15 cm)						
Luidia ciliaris (> 15 cm)						
Blenniidae (3 cm - 15 cm)						
Atelecyclus rotundatus (3 cm - 15 cm)						
Corystes cassivelaunus (3 cm - 15 cm)						
Calliostoma sp. (1 cm - 3 cm)						
Urticina sp. (3 cm - 15 cm)						
Galatheoidea (3 cm - 15 cm)						R
Lanice conchilega (3 cm - 15 cm)						
Serpulidae (3 cm - 15 cm)						
Chelidonichthys cuculus (> 15 cm)		O				
Agonus cataphractus (> 15 cm)		O				
Flustra foliacea (Massive/Turf)						
Encrusting Porifera (Crust/Meadow)						P
Alcyonium digitatum (Massive/Turf)						
Flustridae (Massive/Turf)				R		R
Faunal turf (Hydrozoa/Bryozoa) (Massive/Turf)					R	
Serpulidae (3 cm - 15 cm)						
Sessilia (1 cm - 3 cm)						
Anomiida (1 cm - 3 cm)						P

Key to SACFOR scale							
Absent	Present	Rare	Occasional	Frequent	Common	Abundant	Superabundant