MachairWind Offshore Windfarm

Appendix C – Contaminants Survey Report

ScottishPower Renewables | MachairWind Offshore Windfarm

SEPTEMBER 2024

DOCUMENT ID: MCW-SCH-GEO-REP-FUG-000007
Revision 3

This page is intentionally blank

MachairWind Phase 1 Geophysical and Environmental Survey

MachairWind Offshore Windfarm OAA
Contaminant Chemical Analysis Technical

Survey Period: 24 August to 8 November 2023

F210836-REP-001 03 | 5 June 2024
Final

MachairWind Ltd

Document Control

Document Information

Document Title	MachairWind Phase 1 Geophysical and Environmental Survey MachairWind Offshore Windfarm OAA Contaminant Chemical Analysis Technical
Fugro Project No.	210836
Fugro Document No.	F210836-REP-001
Client Document No.	MCW-SCH-GEO-REP-FUG-000007
Issue Number	03
Issue Status	Final
Fugro Legal Entity	Fugro GB Limited
Issuing Office Address	1 – 9 The Curve, 32 Research Avenue North, Heriot-Watt Research Park, Edinburgh, EH14 4AP, United Kingdom

Client Information

Client	MachairWind Ltd
Client Address	The Soloist, Lanyon Place, Belfast, BT1 3LP, United Kingdom
Client Contact	[redacted]

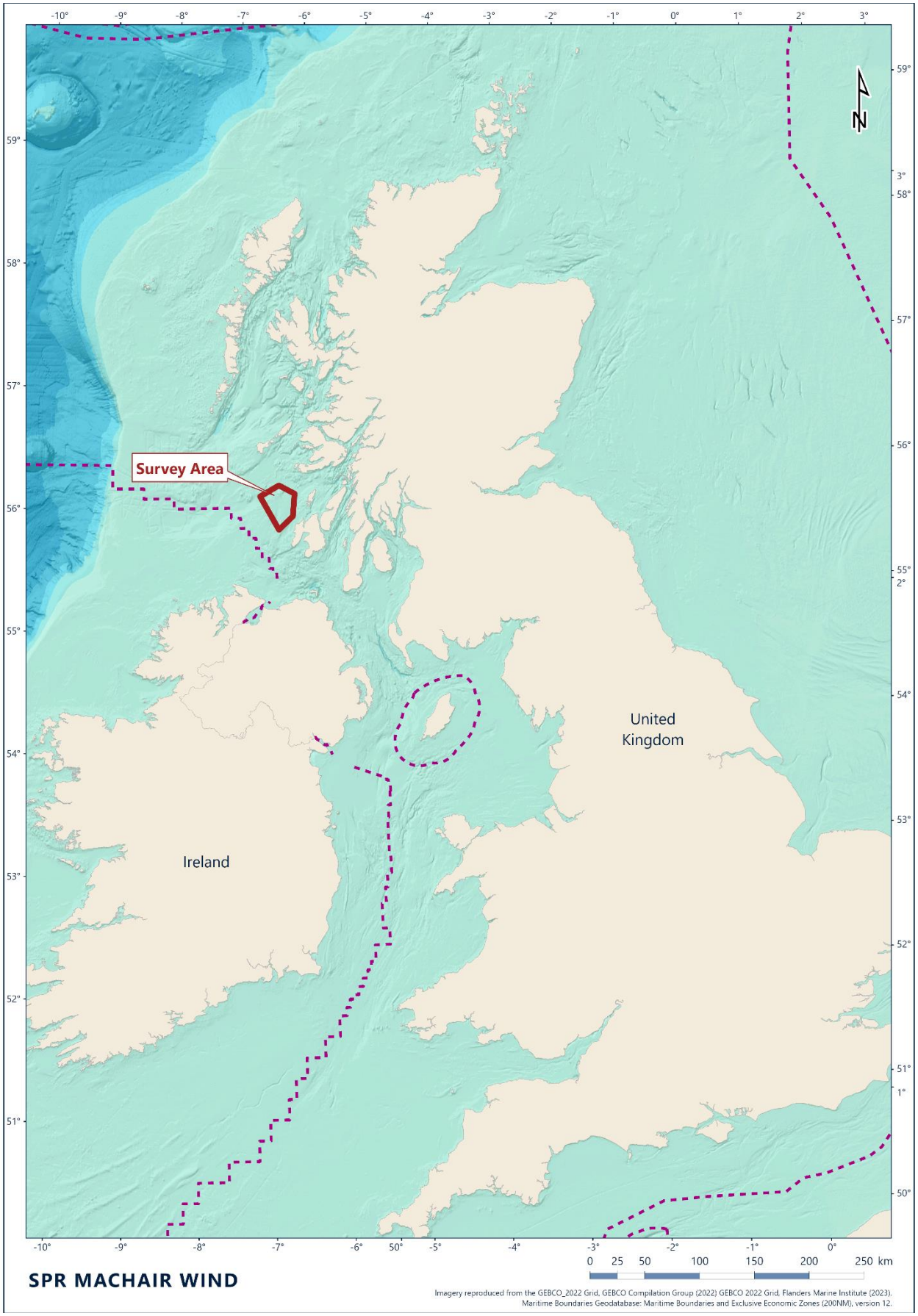
Revision History

Issue	Date	Status	Comments on Content	Prepared By	Checked By	Approved By
01	12 February 2024	Draft	Awaiting client comments	[redacted]		
02	26 April 2024	Complete	Complete report client comments addressed	[redacted]		
03	5 June 2024	Final	Issued as final	[redacted]		

Project Team

Initials	Name	Role
[redacted]		
[redacted]		
[redacted]		

Frontispiece



Executive Summary

Introduction

On the instruction of MachairWind Ltd, Fugro performed a geophysical and environmental characterisation site survey at the proposed MachairWind Offshore Wind Farm Option Agreement Area (OAA). The survey area was located between the northwest of Islay and the west of Colonsay. Operations were conducted onboard the MV Fugro Galaxy during the survey period 24 August to 8 November 2023.

The OAA was divided into four smaller blocks (A to D). Table S.1 presents the coordinates of each block within the MachairWind Offshore Wind Farm survey area.

Table S.1: Survey area extents

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Block A	**Easting**	**Northing**	**Latitude**	**Longitude**
A1	627 181.65	6 217 830.50	56° 05′ 19.20″ N	006° 57′ 21.36″ W
A2	644 309.15	6 227 853.71	56° 10′ 25.62″ N	006° 40′ 31.74″ W
A3	650 992.84	6 224 403.66	56° 08′ 26.70″ N	006° 34′ 11.58″ W
A4	632 344.82	6 208 795.63	56° 00′ 22.08″ N	006° 52′ 38.94″ W
Block B	**Easting**	**Northing**	**Latitude**	**Longitude**
B1	632 344.82	6 208 795.63	56° 00′ 22.08″ N	006° 52′ 38.94″ W
B2	650 992.84	6 224 403.66	56° 08′ 26.70″ N	006° 34′ 11.58″ W
B3	657 867.47	6 220 856.47	56° 06′ 24.06″ N	006° 27′ 41.22″ W
B4	635 950.55	6 202 487.08	55° 56′ 54.54″ N	006° 49′ 22.38″ W
Block C	**Easting**	**Northing**	**Latitude**	**Longitude**
C1	635 950.55	6 202 487.08	55° 56′ 54.54″ N	006° 49′ 22.38″ W
C2	657 867.47	6 220 856.47	56° 06′ 24.06″ N	006° 27′ 41.22″ W
C3	658 620.44	6 220 467.77	56° 06′ 10.56″ N	006° 26′ 58.56″ W
C4	657 993.70	6 211 784.92	56° 01′ 30.78″ N	006° 27′ 53.22″ W
C5	639 483.03	6 196 307.37	55° 53′ 31.20″ N	006° 46′ 10.38″ W
Block D	**Easting**	**Northing**	**Latitude**	**Longitude**
D1	639 483.03	6 196 307.37	55° 53′ 31.20″ N	006° 46′ 10.38″ W
D2	657 993.70	6 211 784.92	56° 01′ 30.78″ N	006° 27′ 53.22″ W
D3	657 146.31	6 200 038.41	55° 55′ 12.18″ N	006° 29′ 06.78″ W
D4	644 440.30	6 187 629.57	55° 48′ 45.48″ N	006° 41′ 41.88″ W

Environmental Survey

Overall, the survey comprised 62 proposed environmental stations, with camera transects and grab sampling, including 30 stations where environmental DNA (eDNA) water samples were to be acquired.

Photographic data were successfully acquired at 59 of the 62 proposed stations. A full suite of grab samples was successfully acquired from 57 out of 62 proposed stations. Water samples were successfully acquired at 29 out of the 30 stations.

Three stations from Block D (MCW-D-ST90, MCW-D-ST96A and MCW-D-ST97A) were removed from the scope of work at the client's request. This also included one eDNA sample and three drop down video transects. Sediment sampling was unsuccessful at two stations in Block C (MCW-C-ST83 and MCW-C-ST91) due to the rocky conditions of the seafloor.

Sediment Chemistry

Sediment samples were analysed for polycyclic aromatic hydrocarbons (PAHs), metals content, polychlorinated biphenyls (PCBs) and organotins. Results were compared to the Marine Scotland Guideline Action Levels (AL1 and AL2), where available.

All total concentrations of aromatic hydrocarbons, including the United States Environmental Protection Agency's 16 priority PAH pollutants (US EPA 16 PAHs) were below their respective Marine Scotland AL1 values in all samples and therefore not considered to be detrimental to the marine environment.

The metals content of the sediments was analysed by aqua regia digest. The bioavailable metals concentrations in the samples were below the respective Marine Scotland Guideline Action Levels (AL1 and AL2) and were therefore not considered to be of ecological concern.

The sum of the 7 PCB congeners were below the respective Marine Scotland guideline AL1 and AL2 values and were therefore not considered to be of ecological concern.

The concentration of tributyltin (TBT) was below the Marine Scotland AL1 and AL2 values in all samples and were therefore not considered to be of ecological concern.

Contents

Appendices

Figures in the Main Text

Tables in the Main Text

Abbreviations

AL1/AL2	Action Level 1 or 2
CEMP	Coordinated Environmental Monitoring Programme
CM	Central meridian
DBT	Dibutyltin
DCM	Dichloromethane
DTI	Department of Trade and Industry
DVV	Dual Van Veen
eDNA	Environmental deoxyribonucleic acid
EOL	End of line
ETRS89	European Terrestrial Reference System 1989
EU	European Union
FA	Faunal sample A
GC	Gas Chromatography
GC-MS	Gas chromatography-mass spectrometry
GNSS	Global Navigation Satellite System
GRS	Geodetic Reference System
HC	Hydrocarbon
HG	Hamon grab
HM	Heavy metal
ICP-MS	Inductively coupled plasma–mass spectrometry
ICP-OES	Inductively coupled plasma – optical emission spectrometry
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
MBT	Monobutyltin
MRV	Minimum reporting value
MV	Motor vessel
NF	No fix
NS	No sample
OAA	Option Agreement Area
OSPAR	Oslo and Paris Commission
PAH	Polycyclic aromatic hydrocarbon
PC	Physico-chemical sample
PCB	Polychlorinated biphenyls
PMF	Priority Marine Feature
PSD	Particle size distribution
RSD	Relative standard deviation
SD	Standard deviation
SOL	Start of line
SSS	Side scan sonar
TBT	Tributyltin
TM	Transverse Mercator
USBL	Ultra-short baseline
US EPA 16 PAHs	United States Environmental Protection Agency's 16 priority PAH pollutants
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
VHF	Very high frequency
WS	Water sample

1. Introduction

1.1 Background

On the instruction of MachairWind Ltd, Fugro performed a characterisation survey including geophysical, and environmental data acquisition at the MachairWind Offshore Wind Farm option agreement area (OAA). The survey area was located between the northwest of Islay and the west of Colonsay. Operations were conducted onboard the MV Fugro Galaxy during the survey period 24 August to 8 November 2023 .

The OAA was divided into four smaller blocks (A to D) displayed in Figure 1.1. The blocks were devised to best work with the fisheries in the area, allowing fishing gear to be removed from a block prior to the vessel arriving to proceed with data and/or sample acquisition.

Table 1.1 presents the coordinates of each block within the MachairWind OAA survey area.

Table 1.1: Survey area extents

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Block A	**Easting**	**Northing**	**Latitude**	**Longitude**
A1	627 181.65	6 217 830.50	56° 05′ 19.20″ N	006° 57′ 21.36″ W
A2	644 309.15	6 227 853.71	56° 10′ 25.62″ N	006° 40′ 31.74″ W
A3	650 992.84	6 224 403.66	56° 08′ 26.70″ N	006° 34′ 11.58″ W
A4	632 344.82	6 208 795.63	56° 00′ 22.08″ N	006° 52′ 38.94″ W
Block B	**Easting**	**Northing**	**Latitude**	**Longitude**
B1	632 344.82	6 208 795.63	56° 00′ 22.08″ N	006° 52′ 38.94″ W
B2	650 992.84	6 224 403.66	56° 08′ 26.70″ N	006° 34′ 11.58″ W
B3	657 867.47	6 220 856.47	56° 06′ 24.06″ N	006° 27′ 41.22″ W
B4	635 950.55	6 202 487.08	55° 56′ 54.54″ N	006° 49′ 22.38″ W
Block C	**Easting**	**Northing**	**Latitude**	**Longitude**
C1	635 950.55	6 202 487.08	55° 56′ 54.54″ N	006° 49′ 22.38″ W
C2	657 867.47	6 220 856.47	56° 06′ 24.06″ N	006° 27′ 41.22″ W
C3	658 620.44	6 220 467.77	56° 06′ 10.56″ N	006° 26′ 58.56″ W
C4	657 993.70	6 211 784.92	56° 01′ 30.78″ N	006° 27′ 53.22″ W
C5	639 483.03	6 196 307.37	55° 53′ 31.20″ N	006° 46′ 10.38″ W
Block D	**Easting**	**Northing**	**Latitude**	**Longitude**
D1	639 483.03	6 196 307.37	55° 53′ 31.20″ N	006° 46′ 10.38″ W
D2	657 993.70	6 211 784.92	56° 01′ 30.78″ N	006° 27′ 53.22″ W
D3	657 146.31	6 200 038.41	55° 55′ 12.18″ N	006° 29′ 06.78″ W
D4	644 440.30	6 187 629.57	55° 48′ 45.48″ N	006° 41′ 41.88″ W

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 (Joint Nature Conservation Committee [JNCC], n.d), habitats and species which qualify as Priority Marine Features (PMFs) in Scotland's seas (NatureScot, 2020) or habitats listed by the Oslo and Paris Convention (OSPAR) as threatened and/or declining (OSPAR, 2008). In addition, grab samples were collected to establish physico-chemical and biological properties of the sediment and water samples were taken for environmental DNA (eDNA) analysis.

This report details the results of the contaminants analysis.

Appendix A outlines the guidelines for use of this report.

1.2 Contaminants Scope of Work

The contaminants survey was conducted to establish whether any contaminant hotspots are present within the MachairWind OAA. Grab samples were taken as part of the geophysical campaign. Sub-samples for contaminant testing were taken from the grab samples to establish the chemical properties of the sediment.

1.3 Environmental Quality Standards for Sediment Chemical Concentrations

The Marine Scotland Action Levels (ALs) are non-statutory guidelines for assessment of disposal of dredged materials to sea. In general, concentrations below Marine Scotland AL1 values are of no concern, whilst concentrations above Marine Scotland AL2 values indicate that dredged material is unsuitable for disposal at sea. Values between Marine Scotland AL1 and AL2 may require further investigatory work prior to a disposal decision (Marine Scotland, 2017).

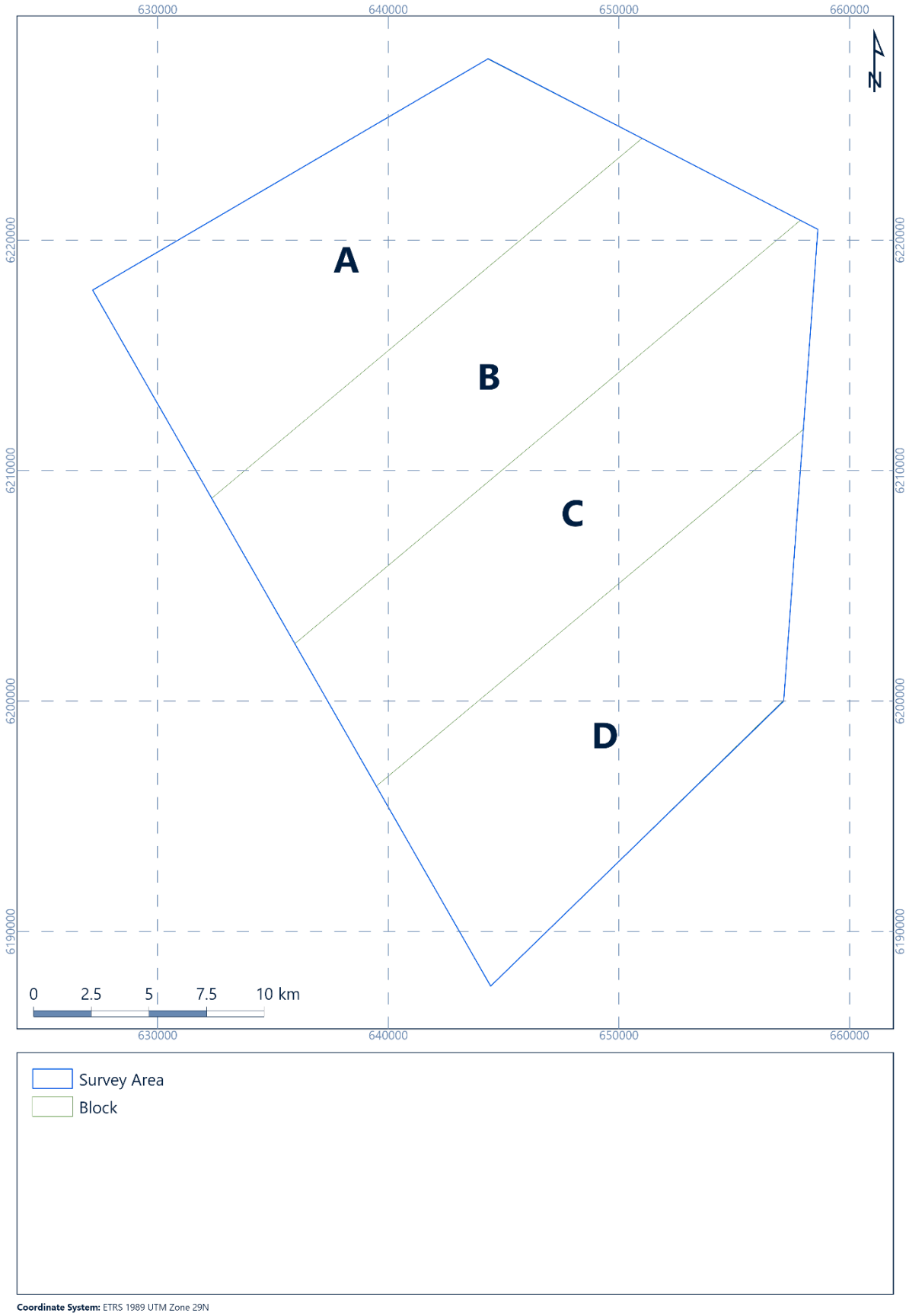


Figure 1.1: Blocks A to D in OAA

1.4 Coordinate Reference System

All coordinates detailed in this report are referenced to European Terrestrial Reference System 1989 (ETRS89) Universal Transverse Mercator (UTM) projection Zone 29N central meridian (CM) 9° West. Table 1.2 provides the detailed geodetic and projection parameters.

Table 1.2: Project geodetic and projection parameters

Global Navigation Satellite System (GNSS) Geodetic Parameters*			
Datum:		International Terrestrial Reference Frame 2014	ESPG: 1165
Spheroid:		GRS 1980	
Semi major axis:		a = 6 378 137.000 m	
Reciprocal flattening:		1/f = 298.257 222 101	
Local Geodetic Datum Parameters			
Datum:		European Terrestrial Reference System 1989	ESPG: 6258
Spheroid:		GRS 1980	
Semi major axis:		a = 6 378 137.000 m	
Reciprocal flattening:		1/f = 298.257 222 101	
Datum Transformation Parameters from ITRF2014 to ETRS89			
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	Coordinate Frame Rotation
Shift dZ:	-0.10023 m	Rotation rZ: +0.027522" arc sec	FUGRO: 41366
Local Projection Parameters†			
Map Projection:		Universal Transverse Mercator (TM)	
Grid System		UTM Zone 29N	ESPG: 16029
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
* = The geodetic datum of Fugro's global GNSS correction data is ITRF2014, epoch 2023.75 (01/10/2023 18:00:00)
† = This is the right-hand coordinate frame rotation used by the Fugro Starfix navigation software

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 total number of each sample acquired for each sample type is listed below:

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

In accordance with the guidelines in the SoW, no more than three attempts were to be made at each station to collect a valid sample before the station was to be abandoned or re-positioned.

After geophysical data had been acquired, the side scan sonar (SSS) and bathymetric data were reviewed by the onboard environmental scientist in conjunction with the onboard geophysicist to confirm the 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.

Table 2.1 provides the coordinates, data to be acquired and rationale for each location, including relocated coordinates based on the SSS interpretation. Figure 2.1 provides a spatial display of the proposed survey locations overlain on the SSS mosaic.

Table 2.1: Proposed sampling stations

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
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	Original station location moved to investigate an 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	Station moved to investigate area of high SSS reflectivity and potential rippled sediment	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	Station moved 1096 m to the east from the original*	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	Station moved 500 m to the north-west from the original location*	Video, stills, PSD, FA
MCW-B-ST18A	651 370.4	6 220 727.7	Station moved 500 m to the south-east. Transect extended to investigate a patch of high SSS reflectivity*	Video, stills, PC, FA, eDNA
MCW-B-ST19A	654 912.3	6 219 783.6	Station moved 500 m to the south-east from the original location*	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	Station moved 500 m to the south-east from the original location*	Video, stills, PSD, FA

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Station	Easting	Northing	Rationale	Data and Sample Acquisition
MCW-B-ST30A	652 141.6	6 217 458.6	Station moved 500 m to the south-east from the original location*	Video, stills, PC, FA, eDNA
MCW-B-ST38A	644 136.5	6 214 657.6	Station moved 500 m to the south-east from the original location*	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	Station moved 755 m to the north-west from the original location*	Video, stills, PC, eDNA
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 to area of soft sediment 501 m away to the south-east	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

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Station	Easting	Northing	Rationale	Data and Sample Acquisition
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	Station moved 716 m to the east from the original location	Video, stills, PC, eDNA
MCW-D-ST88A	651 542.8	6 201 944.0	Station moved 504 m to the north-west from the original location	Video, stills, PSD, FA
MCW-D-ST89A	654 093.0	6 202 125.7	Station moved 507m to the north-west from the original location	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	Station moved 1001 m to the south-east from the original location	Video, stills, PC, eDNA
MCW-D-ST96A	651 988.0	6 199 054.1	Station moved 814 m to the east from the original location	Video, stills, PSD, FA
MCW-D-ST97A	654 477.5	6 200 490.3	Station moved 1396 m to the north from the original location	Video, stills, PC, FA, eDNA
MCW-D-ST100A	654 921.0	6 197 226.7	Station moved 1000 m to the north-west to an area of soft sediment	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	Station moved 242 m to the south-east to an area of soft sediment	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	Station moved 501 m to the north-west to an area of soft sediment	Video, stills, PC, eDNA

Notes
SSS = Side scan sonar
PC = Physical chemical
PSD = Particle size distribution
FA = Faunal sample A
eDNA = Environmental deoxyribonucleic acid
* = Stations relocated to coincide with priority geophysical survey lines
Station names with the suffix 'A' were moved from original client defined positions

Figure 2.1: Proposed environmental survey locations

3. Survey Methods

3.1 Sediment Grab Sampling

Seafloor samples were acquired using a 0.1 m^2 dual van Veen (DVV) grab. In areas that comprised sediments that were too coarse for the DVV grab to take a successful sample, a 0.1 m^2 Hamon grab (HG) was used.

Operational procedures for grab sampling were as follows:

- The 0.1 m^2 DVV grab or 0.1 m^2 Hamon grab was prepared for operations prior to arrival on station. An ultra-short baseline (USBL) beacon was attached to the grab frame. The Bridge communicated to the deck via a VHF radio when the vessel was steady and on location, and the grab was deployed from the starboard A-frame;
- When the engineer operating the winch observed that the grab had reached the seafloor (evidenced through a distinct slackening of the wire rope and snatch Block), the online surveyor was informed (via VHF radio) and a fix was captured;
- On recovery to the deck, the sample was inspected and judged acceptable or otherwise (see below for rejection criteria);
- One accepted grab sample was retained for faunal analysis and one grab sample was retained and subsampled for physico-chemical analysis;
- Deck logs were completed for each sample acquired (including no samples) with: date, time, sample number, fix number, sediment type, depth and colour of strata in the sediment (if any) using Munsell colour codes, odour (i.e. H_2S), bioturbation or debris.

Samples were considered unacceptable in the following instances:

- Evidence of sediment washout caused through improperly closed grab jaws or inspection hatch;
- Sediment sample collected on an angle; the grab jaws were not parallel to the seafloor when the grab fired;
- Disruption of the sample through striking the side of the vessel;
- Sample represented less than approximately 7 cm bite depth of the DVV grab or less than 5 L sample volume of the HG (unless deemed acceptable by the client representative);
- The presence of a hagfish (*Myxine glutinosa*) and/or other mucous coagulants;
- Sample from more than 10 m from the target location (unless deemed acceptable by the client representative);
- Deemed unacceptable by the client representative for any other reason.

3.1.1 Physico-chemical Sample Processing

- Hydrocarbon (HC) samples were collected using a metal scoop to a nominal depth of 2 cm. Samples collected were HCA1 and HCA2. The samples were preserved in glass jars at approximately −20 °C;
- Heavy metal (HM) samples were collected using a plastic scoop to a nominal depth of 2 cm. Samples collected were HMA1 and HMA2. The samples were preserved in polythene bags at approximately −20 °C;
- PSD samples were collected using a plastic scoop to a nominal depth of 5 cm. Samples collected were PSDA1 and PSDA2. The samples were preserved in polythene bags at approximately −20 °C.

Further details on survey methodology are available within Appendix B.

3.2 Laboratory Methods

Brief analytical methodologies are described in the following subsections. Further descriptions of the analytical methodologies are detailed in Appendix B.

3.2.1 Sediment Hydrocarbons

The sediment samples were analysed for hydrocarbon content including polycyclic aromatic hydrocarbons (PAHs), specifically the United States Environmental Protection Agency's 16 priority PAH pollutants (US EPA 16 PAHs) and alkylated PAHs.

3.2.2 Sediment Metals

The sediment samples were analysed using an aqua regia digest technique. This provides a strong partial digest, releasing into solution metals associated with the fines fraction within the sediments (but does not extract all trace elements associated with the coarse fraction). The concentrations of metals released by an aqua regia digest are typically considered indicative of those influencing biological interactions, as the released metals are not incorporated into the mineral matrix and are therefore potentially available for biological uptake.

3.2.3 Sediment Polychlorinated Biphenyls

Sediment samples were analysed using accelerated solvent extraction.

3.2.4 Sediment Organotins

Sediment samples were analysed using solvent extraction and derivatisation.

4. Results

4.1 Field Operations

4.1.1 Seafloor Sampling

Grab samples were successfully acquired at 57 out of 62 proposed stations (Table 4.1).

Sediment sampling was unsuccessful at two stations in Block C, MCW-C-ST83 and MCW-C-ST91 due to the presence of rock. These stations were abandoned and removed from the scope of work.

Three stations in Block D, MCW-D-ST90A, MCW-D-ST96A and MCW-D-ST97A were removed from the scope as per the client's request.

Table 4.1: Completed sediment sampling stations

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
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

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Station	Easting*	Northing*	Depth [m LAT]	Sample Acquisition
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
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-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

Geodetic Parameters: ETRS89, UTM Zone 30N, CM 3°W [m]				
Station	Easting*	Northing*	Depth [m LAT]	Sample Acquisition
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

Notes
* = Coordinates presented for the PC or PSD grab sample
LAT = Lowest Astronomical Tide
PC = Physico-chemical sample
FA = Faunal sample
PSD = Particle size distribution
eDNA = Environmental DNA

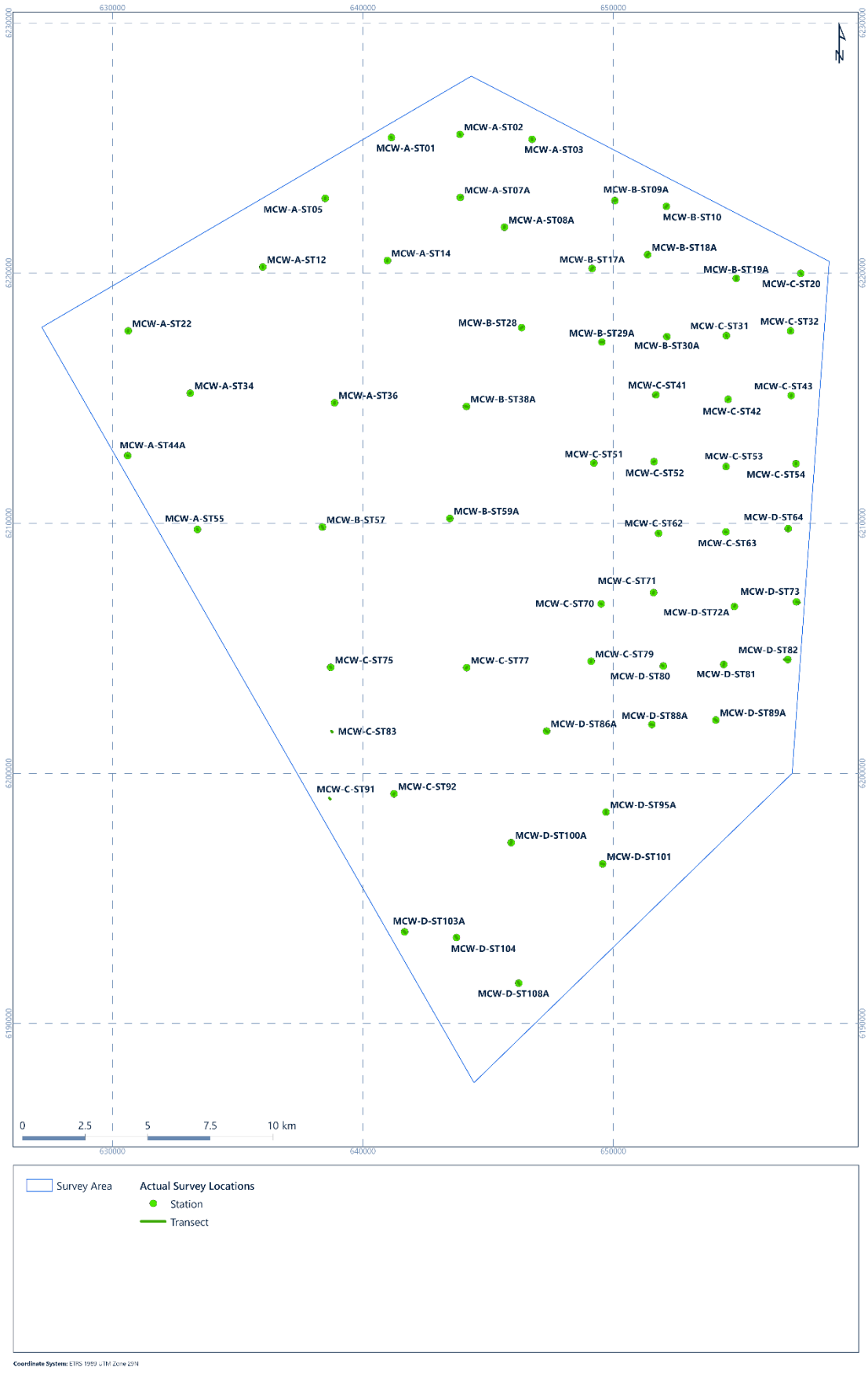


Figure 4.1: Actual environmental survey locations

4.2 Sediment Chemistry

4.2.1 Sediment Hydrocarbons

Relative standard deviation (RSD) values have been provided to indicate the extent of variability in the dataset. For the purpose of this report, an RSD of less than 30 % will be considered low variability, 30 % to 70 % will be considered moderate variability, and more than 70 % will be considered high variability.

4.2.1.1 Sediment Aromatic Hydrocarbon Content

Total 2 to 6 ring polycyclic aromatic hydrocarbon (PAH) concentrations are calculated as the sum of individual PAHs, some of which were less than the minimum reporting value (MRV). Consequently, the total 2 to 6 ring PAH concentration is assigned as a less than value. However, the concentrations of the individual PAHs that were less than the MRV are unlikely to significantly influence the total 2 to 6 ring PAH concentrations. Therefore, for the purposes of this report, total 2 to 6 ring PAH and US EPA 16 PAH concentrations are treated as absolute values to provide comparison between stations.

Table 4.2 summarises the total concentrations of aromatic hydrocarbons, including the US EPA 16 PAHs. Figure 4.2 shows the spatial distribution of total 2 to 6 PAHs across the survey area. Appendix D.1 presents the individual aromatic hydrocarbon and their alkyl homologue concentrations across the MachairWind OAA survey area, including the US EPA 16 PAH concentrations with threshold values where available.

Total US EPA 16 PAH concentrations ranged from < 2.3 ng/g (stations MCW-D-ST95A and MCW-D-ST100A) to < 25.0 ng/g (station MCW-A-ST02).

Total 2 to 6 ring PAH concentrations ranged from < 8.4 ng/g (station MCW-D-ST100A) to 83.4 ng/g (station MCW-A-ST02)

All total concentrations of aromatic hydrocarbons, including the US EPA 16 PAHs were below their respective Marine Scotland AL1 values.

Table 4.2: Summary of sediment aromatic hydrocarbon analysis for the grab samples

PAH [ng/g of Dry Sediment]	MCW-A-ST02	MCW-A-ST05	MCW-A-ST08A	MCW-A-ST12	MCW-A-ST14	MCW-A-ST22	MCW-A-ST34	MCW-A-ST36	MCW-A-ST55	MCW-B-ST18A	MCW-B-ST28	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57	MCW-B-ST59A	Marine Scotland (2017) AL1
Naphthalene	1.2	0.4	0.3	0.4	0.2	0.8	0.4	0.2	0.5	0.5	0.6	0.3	0.9	0.2	0.9	**100**
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**100**
Acenaphthene	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.1	**100**
Fluorene	0.5	0.2	0.1	0.2	0.1	0.3	0.1	< 0.1	0.2	0.2	0.3	0.1	0.3	0.1	0.4	**100**
Phenanthrene	2.3	0.9	0.5	0.8	0.3	1.3	0.7	0.2	0.8	0.9	1.2	0.5	1.5	0.4	2.0	**100**
Anthracene	0.2	0.1	< 0.1	0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	0.1	< 0.1	0.1	< 0.1	0.2	**100**
Fluoranthene	2.5	1.1	0.6	1.0	0.4	1.6	0.9	0.3	0.8	1.2	1.5	0.6	1.6	0.4	1.9	**100**
Pyrene	2.2	1.0	0.6	0.9	0.6	1.5	0.8	0.5	1.2	1.2	1.4	0.7	2.0	0.4	1.5	**100**
Benzo(a)anthracene	1.1	0.5	0.2	0.4	0.1	0.7	0.3	0.1	0.3	0.5	0.6	0.3	0.6	0.2	0.9	**100**
Chrysene	1.1	0.5	0.3	0.5	0.2	0.7	0.4	0.1	0.4	0.5	0.7	0.4	0.8	0.2	1.0	**100**
Benzo(b)fluoranthene	6.5	2.7	1.1	2.3	0.8	3.3	1.6	0.6	1.5	3.0	3.3	1.3	2.9	0.9	4.1	**100**
Benzo(k)fluoranthene	1.6	0.7	0.2	0.6	0.1	0.9	0.4	0.1	0.4	0.7	0.9	0.4	0.8	0.2	1.2	**100**
Benzo(a)pyrene	1.1	0.5	0.2	0.5	0.1	0.8	0.3	0.1	0.3	0.4	0.8	0.3	0.7	0.2	1.2	**100**
Indeno(123cd)pyrene	2.4	1.1	0.4	1.4	0.3	2.2	0.8	0.2	0.8	1.1	2.4	1.0	2.2	0.7	3.5	**100**
Benzo(ghi)perylene	1.7	0.9	0.4	1.2	0.2	1.9	0.8	0.2	0.7	0.8	2.2	0.9	2.1	0.6	3.1	**100**
Dibenzo(ah)anthracene	0.4	0.2	0.1	0.2	0.1	0.3	0.1	< 0.1	0.1	0.2	0.4	0.2	0.4	0.1	0.6	**10**
Total US EPA 16 PAH	**< 25.0**	**< 11.0**	**< 5.3**	**< 10.7**	**< 3.8**	**< 16.6**	**< 7.9**	**< 3.1**	**< 8.3**	**< 11.5**	**< 16.6**	**< 7.3**	**< 17.1**	**< 4.9**	**< 22.7**	**-**
Total 2 to 6 Ring PAH	**83.4**	**37.5**	**< 21.6**	**34.3**	**< 20.6**	**53.2**	**27.4**	**< 15.9**	**29.6**	**39.3**	**50.2**	**22.7**	**57.3**	**< 16.7**	**70.8**	**-**

Notes
Concentrations expressed in ng/g dry sediment
AL1 = Action level 1 AL2 = Action level 2 US EPA 16 PAH = United States Environmental Protection Agency's 16 priority PAH pollutants

Key	Below AL1 value	Above AL1 value

PAH [ng/g of Dry Sediment]	MCW-C-ST42	MCW-C-ST51	MCW-C-ST63	MCW-C-ST70	MCW-C-ST75	MCW-C-ST77	MCW-C-ST92	MCW-D-ST80	MCW-D-ST82	MCW-D-ST86	MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST104	MCW-D-ST108A	Marine Scotland (2017) AL1
Naphthalene	0.3	0.6	0.5	0.4	0.4	0.3	0.1	0.5	0.3	0.2	0.1	0.1	0.4	0.2	100
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	100
Acenaphthene	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	100
Fluorene	0.1	0.2	0.2	0.2	0.2	0.1	< 0.1	0.2	0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	100
Phenanthrene	0.5	1.1	0.9	0.8	0.7	0.5	0.2	1.1	0.4	0.3	0.1	0.2	0.6	0.4	100
Anthracene	< 0.1	0.1	0.1	0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	100
Fluoranthene	0.4	1.1	0.9	0.9	0.7	0.6	0.2	1.1	0.4	0.3	0.2	0.1	0.4	0.3	100
Pyrene	0.6	0.9	0.8	0.8	0.7	0.6	0.3	1.0	0.5	0.5	0.4	0.1	0.4	0.3	100
Benzo[a]anthracene	0.2	0.5	0.4	0.4	0.3	0.3	0.1	0.5	0.2	0.1	0.1	0.1	0.3	0.2	100
Chrysene	0.3	0.6	0.5	0.5	0.4	0.3	0.1	0.6	0.2	0.2	0.1	0.1	0.3	0.2	100
Benzo[b]fluoranthene	0.9	2.3	2.0	1.9	1.5	1.2	0.4	2.1	0.8	0.6	0.2	0.4	0.9	0.6	100
Benzo[k]fluoranthene	0.3	0.7	0.6	0.6	0.4	0.4	0.1	0.6	0.2	0.2	0.1	0.1	0.2	0.2	100
Benzo[a]pyrene	0.2	0.7	0.5	0.5	0.4	0.3	0.1	0.6	0.2	0.2	0.1	0.1	0.3	0.2	100
Indeno[1,2,3-cd]pyrene	0.7	2.0	1.8	1.6	1.2	1.1	0.3	1.7	0.6	0.5	0.2	0.3	0.5	0.5	100
Benzo[ghi]perylene	0.7	1.8	1.5	1.4	1.0	0.9	0.3	1.6	0.6	0.5	0.2	0.2	0.4	0.4	100
Dibenzo[ah]anthracene	0.1	0.3	0.3	0.3	0.2	0.1	< 0.1	0.3	0.1	< 0.1	< 0.1	0.1	0.1	0.1	10
Total US EPA 16 PAH	**< 5.6**	**< 13.1**	**< 11.2**	**< 10.6**	**< 8.4**	**< 7.0**	**< 2.7**	**< 12.2**	**< 4.9**	**< 4.6**	**< 2.3**	**< 2.3**	**< 5.2**	**< 4.0**	-
Total 2 to 6 Ring PAH	**< 19.9**	**46.5**	**36.0**	**32.3**	**< 28.3**	**< 22.4**	**< 12.9**	**41.2**	**< 17.3**	**< 14.2**	**< 8.5**	**< 8.4**	**19.6**	**< 14.5**	-

Notes
Concentrations expressed in ng/g dry sediment
AL1 = Action level 1 AL2 = Action level 2 US EPA 16 PAH = United States Environmental Protection Agency's 16 priority PAH pollutants

Key	Below AL1 value	Above AL1 value

Figure 4.2: Spatial distribution of total 2 to 6 ring PAH concentrations

4.2.2 Sediment Metals

Table 4.3 summarises the concentrations of the extractable metals in the sediment samples from an aqua regia digest.

Figure 4.3 and Figure 4.4 show the spatial distribution of arsenic and chromium across the survey area. Chromium was presented as it had moderate variability (RSD 32 %). The remaining metals had low variability (RSD ≤ 30 %), so arsenic was chosen as a representative example.

All metals concentrations were below the respective Marine Scotland Guideline Action Levels (AL1 and AL2).

Arsenic concentrations displayed low variability (RSD 22 %). Concentrations ranged from 4.01 µg/g (station MCW-A-ST22) to 10.1 µg/g (station MCW-D-ST100A), with a mean of 5.84 µg/g.

Cadmium concentrations displayed moderate variability (RSD 30 %). Concentrations ranged from 0.02 µg/g (at ten stations) to 0.05 µg/g (station MCW-D-ST82), with a mean of 0.03 µg/g.

Chromium concentrations displayed moderate variability (RSD 32 %). Concentrations ranged from 3.40 µg/g (station MCW-D-ST95A) to 14.1 µg/g (station MCW-B-ST18A), with a mean of 8.95 µg/g.

Copper concentrations displayed low variability (RSD 28 %). Concentrations ranged from 0.8 µg/g (station MCW-D-ST95A) to 2.7 µg/g (station MCW-B-ST28), with a mean of 1.6 µg/g.

All mercury concentrations were below the MRV (< 0.03 µg/g), so no statistics were calculated.

Nickel concentrations displayed low variability (RSD 21 %). Concentrations ranged from 3.0 µg/g (station MCW-D-ST95A) to 8.1 µg/g (station MCW-D-ST108A), with a mean of 6.0 µg/g.

Lead concentrations displayed low variability (RSD 28 %). Concentrations ranged from 2.0 µg/g (station MCW-D-ST95A) to 6.3 µg/g (station MCW-B-ST28), with a mean of 4.2 µg/g.

Table 4.3: Summary of sediment metals analysis for the grab samples

Station	As	Cd	Cr	Cu	Hg	Ni	Pb
MCW-A-ST02	4.56	0.04	11.6	2.3	< 0.03	7.2	5.3
MCW-A-ST05	5.03	0.03	11.2	1.5	< 0.03	6.9	4.9
MCW-A-ST08A	6.36	0.02	6.55	1.3	< 0.03	5.3	4.3
MCW-A-ST12	4.84	0.03	12.0	1.7	< 0.03	7.1	4.7
MCW-A-ST14	4.76	0.02	10.9	1.3	< 0.03	6.7	3.2
MCW-A-ST22	4.01	0.04	13.0	1.8	< 0.03	7.1	4.6
MCW-A-ST34	4.94	0.02	9.44	1.5	< 0.03	7.3	3.8
MCW-A-ST36	4.50	0.02	8.24	1.2	< 0.03	7.5	2.6
MCW-A-ST55	5.15	0.02	8.03	1.4	< 0.03	6.3	3.2
MCW-B-ST18A	5.18	0.03	14.1	2.4	< 0.03	6.6	5.6
MCW-B-ST28	5.66	0.04	11.8	2.7	< 0.03	6.3	6.3
MCW-B-ST30A	6.84	0.02	10.9	1.7	< 0.03	6.7	5.5
MCW-B-ST38A	5.51	0.04	13.2	1.9	< 0.03	6.9	5.7
MCW-B-ST57	4.59	0.02	6.84	1.5	< 0.03	5.7	3.2
MCW-B-ST59A	6.41	0.04	10.6	1.8	< 0.03	6.3	5.4
MCW-C-ST42	7.74	0.02	9.51	1.4	< 0.03	7.2	4.2
MCW-C-ST51	5.17	0.03	8.73	1.9	< 0.03	6.4	5.3
MCW-C-ST63	6.14	0.04	9.61	1.9	< 0.03	6.0	5.7
MCW-C-ST70	5.27	0.04	7.73	1.4	< 0.03	5.0	4.1
MCW-C-ST75	5.68	0.02	8.97	1.4	< 0.03	6.6	3.8
MCW-C-ST77	6.17	0.03	6.95	1.3	< 0.03	4.9	3.9
MCW-C-ST92	5.76	0.02	7.88	1.1	< 0.03	5.6	2.4
MCW-D-ST80	5.18	0.04	7.35	1.7	< 0.03	5.3	4.3
MCW-D-ST82	7.99	0.05	4.31	1.3	< 0.03	3.3	4.4
MCW-D-ST86	6.30	0.03	7.22	1.2	< 0.03	5.9	3.0
MCW-D-ST95A	5.76	0.03	3.40	0.8	< 0.03	3.0	2.0
MCW-D-ST100A	10.1	0.04	4.69	1.1	< 0.03	4.1	2.6
MCW-D-ST104	8.16	0.04	3.88	1.1	< 0.03	3.6	3.4
MCW-D-ST108A	5.59	0.04	10.9	2.2	< 0.03	8.1	3.1
Minimum	**4.01**	**0.02**	**3.40**	**0.8**	**< 0.03**	**3.0**	**2.0**
Maximum	**10.1**	**0.05**	**14.1**	**2.7**	**< 0.03**	**8.1**	**6.3**
Median	**5.59**	**0.03**	**8.97**	**1.5**	**-**	**6.3**	**4.2**
Mean	**5.84**	**0.03**	**8.95**	**1.6**	**-**	**6.0**	**4.2**
SD	**1.31**	**0.009**	**2.84**	**0.44**	**-**	**1.29**	**1.15**
RSD	**22**	**30**	**32**	**28**	**-**	**21**	**28**
Marine Scotland Guideline Action Levels							
AL1	**20**	**0.4**	**50**	**30**	**0.25**	**30**	**50**
AL2	**70**	**4**	**370**	**300**	**1.5**	**150**	**400**

Notes
Concentrations expressed in µg/g dry sediment

As = Arsenic | Cd = Cadmium | Cr = Chromium
Cu = Copper | Hg = Mercury | Ni = Nickel
Pb = Lead | SD = Standard deviation
AL1 = Action level 1 | AL2 = Action level 2 | RSD = Relative Standard Deviation

Key	Below AL1 value	Above AL1 value	Above AL2 value

Figure 4.3: Spatial distribution of Arsenic

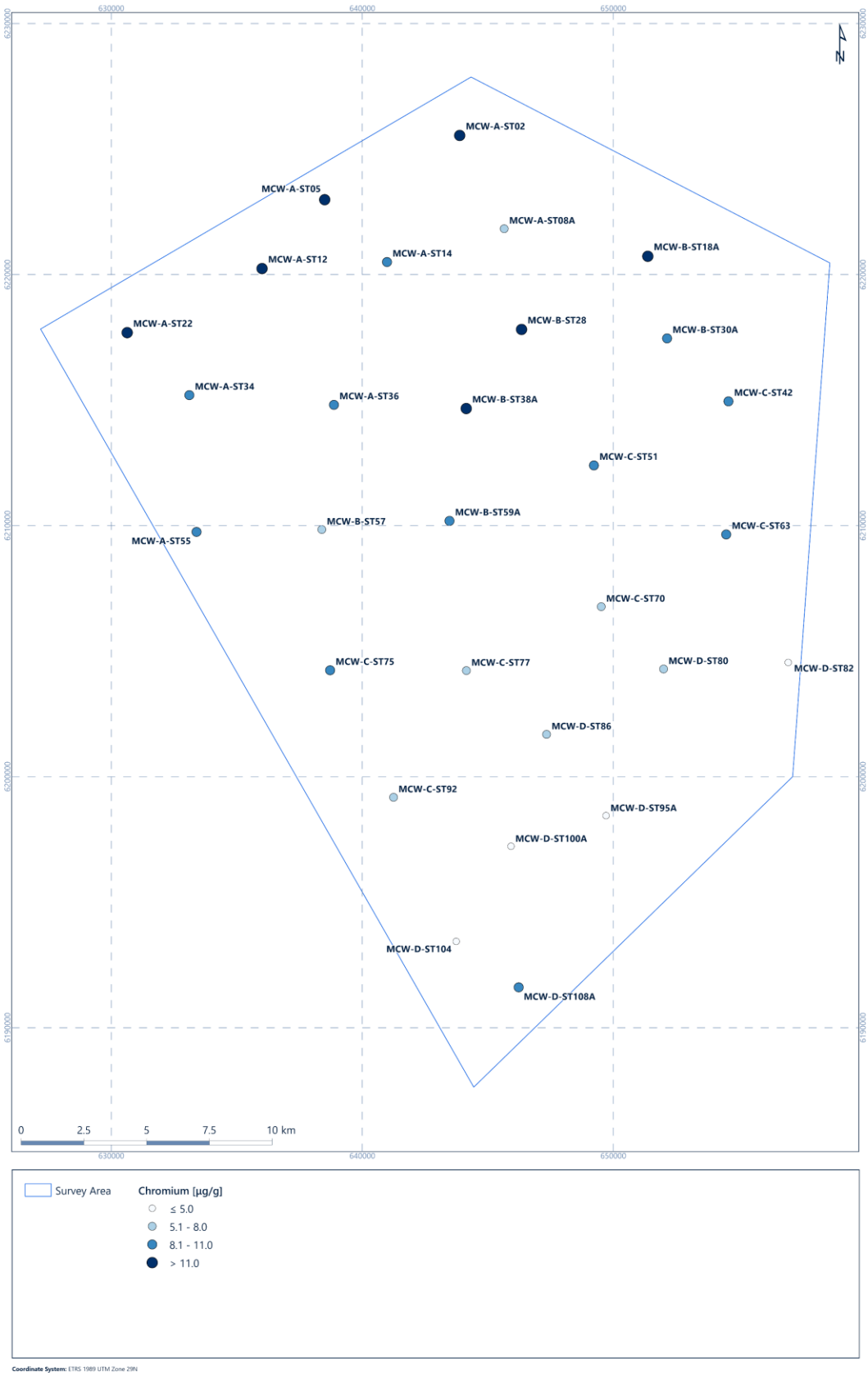


Figure 4.4: Spatial distribution of Chromium

4.2.3 Sediment Polychlorinated Biphenyls

Table 4.4 summarises the concentrations of PCBs in the sediment samples.

Concentrations of individual PCBs and total ICES 7 PCBs were below their MRVs (< 0.020 ng/g and < 0.140 ng/g, respectively).

The sum of the 7 congeners was below the Marine Scotland Guideline AL1 (20 ng/g) and AL2 (180 ng/g) at all stations.

Table 4.4: Summary of polychlorinated biphenyls (PCBs) analysis

Station	PCB - 028	PCB - 052	PCB - 101	PCB - 118	PCB - 138	PCB - 153	PCB - 180	Total ICES 7 PCBs
MCW-A-ST02	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST05	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST08A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST12	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST14	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST22	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST34	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST36	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-A-ST55	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST18A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST28	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST30A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST38A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST57	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-B-ST59A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST42	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST51	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST63	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST70	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST75	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST77	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-C-ST92	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST80	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST82	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST86	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST95A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST100A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**

Station	PCB - 028	PCB - 052	PCB - 101	PCB - 118	PCB - 138	PCB - 153	PCB - 180	Total ICES 7 PCBs
MCW-D-ST104	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
MCW-D-ST108A	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	**< 0.140**
Minimum	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.140**
Maximum	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.020**	**< 0.140**
Median	-	-	-	-	-	-	-	-
Mean	-	-	-	-	-	-	-	-
SD	-	-	-	-	-	-	-	-
RSD	-	-	-	-	-	-	-	-
Marine Scotland Guideline Action Levels								
AL1	-	-	-	-	-	-	-	**20**
AL2	-	-	-	-	-	-	-	**180**

Notes
Concentrations expressed in ng/g dry weight
SD = Standard deviation
AL1 = Action Level 1
AL2 = Action Level 2

Key	Below AL1 value	Above AL1 value	Above AL2 value

4.2.4 Sediment Organotins

Table 4.5 summarises the concentrations of organotins in the sediment samples. The organotins analysed were dibutyltin (DBT) and tributyltin (TBT).

All values were below the MRV (< 0.400 ng/g).

All TBT concentrations were below the Marine Scotland AL1 value (100 ng/g) and AL2 value (500 ng/g).

Table 4.5: Summary of organotins analysis for the grab samples

Station	Dibutyltin (DBT)	Tributyltin (TBT)
MCW-A-ST02	< 0.400	< 0.400
MCW-A-ST05	< 0.400	< 0.400
MCW-A-ST08A	< 0.400	< 0.400
MCW-A-ST12	< 0.400	< 0.400
MCW-A-ST14	< 0.400	< 0.400
MCW-A-ST22	< 0.400	< 0.400
MCW-A-ST34	< 0.400	< 0.400
MCW-A-ST36	< 0.400	< 0.400
MCW-A-ST55	< 0.400	< 0.400
MCW-B-ST18A	< 0.400	< 0.400

Station	Dibutyltin (DBT)	Tributyltin (TBT)
MCW-B-ST28	< 0.400	< 0.400
MCW-B-ST30A	< 0.400	< 0.400
MCW-B-ST38A	< 0.400	< 0.400
MCW-B-ST57	< 0.400	< 0.400
MCW-B-ST59A	< 0.400	< 0.400
MCW-C-ST42	< 0.400	< 0.400
MCW-C-ST51	< 0.400	< 0.400
MCW-C-ST63	< 0.400	< 0.400
MCW-C-ST70	< 0.400	< 0.400
MCW-C-ST75	< 0.400	< 0.400
MCW-C-ST77	< 0.400	< 0.400
MCW-C-ST92	< 0.400	< 0.400
MCW-D-ST80	< 0.400	< 0.400
MCW-D-ST82	< 0.400	< 0.400
MCW-D-ST86	< 0.400	< 0.400
MCW-D-ST95A	< 0.400	< 0.400
MCW-D-ST100A	< 0.400	< 0.400
MCW-D-ST104	< 0.400	< 0.400
MCW-D-ST108A	< 0.400	< 0.400
Minimum	**< 0.400**	**< 0.400**
Maximum	**< 0.400**	**< 0.400**
Median	-	-
Mean	-	-
SD	-	-
RSD	-	-
Marine Scotland Guideline Action Levels		
AL1	-	**100**
AL2	-	**500**
Notes Concentrations expressed as ng/g dry weight (as cation) SD = Standard Deviation AL1 = Action Level 1 AL2 = Action Level 2		
Key	Below AL1 value	Above AL1 value

5. Discussion

5.1 Sediment Chemistry

5.1.1 Sediment Hydrocarbons

5.1.1.1 Aromatic Hydrocarbons

PAHs are widely spread in the environment (Butler et al., 1984) with natural sources occurring primarily through synthesis by plants (Neff, 1979; Sims & Overcash, 1983), related to natural seeps of petroleum (NRC, 1983; Kennicutt et al., 1988) and to formation during natural forest and prairie fires (Youngblood & Blumer, 1975; Wakeham et al., 1980). By far the greatest proportion of PAHs released into the environment are formed during fossil fuel combustion and anthropogenic forest and agricultural fires (Edwards, 1983; Sims & Overcash, 1983; Haritash & Kaushik, 2009). PAHs primarily enter marine sediments from atmospheric and riverine inputs and tend to adsorb to suspended inorganic and organic particulate matter, ultimately settling on the seafloor where they accumulate to relatively high concentrations (Latimer & Zheng, 2003; Culotta et al., 2006).

Monitoring of aromatic hydrocarbon type and content is important due to the particularly toxic nature (mutagenic/carcinogenic) of several PAHs, particularly the heavier weight PAHs. The US EPA has identified 16 priority PAHs to be monitored (Keith, 2014) and the CEMP specifies 9 PAHs of specific concern (OSPAR, 2014), which primarily reflect inputs from anthropogenic combustion sources.

PAH concentrations across the survey area were below the Marine Scotland Guideline Action Level (AL1) and therefore not considered to be detrimental to the marine environment.

5.1.2 Sediment Metals

Metals and metalloids occur naturally in the marine environment and are widely distributed in both dissolved and sedimentary forms. Some are essential to marine life while others have no biological function and therefore are toxic to numerous organisms at certain levels (Paez-Osuna & Ruiz-Fernandez, 1995; Boening, 1999). Metals can enter the environment via natural methods such as riverine transport, coastal discharges, geological weathering and atmospheric fallout (Brady et al., 2015). Other routes into marine sediments are from anthropogenic activities such as direct discharges from industrial activities.

Trace metal contaminants in the marine environment tend to form associations with the non-residual phases of mineral matter, such as iron and manganese oxides and hydroxides, metal sulphides, clays, organics and carbonates (Warren & Zimmerman, 1993; Dang et al., 2015; Wang et al., 2015). Non-residual trace metals are associated with more reactive and available sediment components through processes such as adsorption onto mineral surfaces and organic complexation. Metals associated with these more reactive phases are prone to

various environmental interactions and transformations (physical, chemical and biological) potentially increasing their mobility and biological availability (Tessier et al., 1979; Warren & Zimmerman, 1993; Du Laing et al., 2009). Residual trace metals are defined as those that are part of the crystal structure of the component minerals and are generally unavailable to organisms (de Orte et al., 2018). Therefore, in monitoring trace metal contamination of the marine environment, it is important to distinguish the more mobile non-residual trace metals from the residual metals held tightly in the sediment lattice (Chester & Voutsinou, 1981), which are of comparatively lesser environmental significance because of their low reactivity and availability.

In this study, an analytical procedure involving the digestion of sediment in aqua regia was employed to analyse the elemental content of the sediments. The aqua regia digest releases for analysis the 'non-residual' heavy metals, which are not incorporated in the mineral matrix and are therefore potentially available for biological uptake.

The bioavailable metals concentrations in the samples were below the respective Marine Scotland Guideline Action Levels (AL1 and AL2) and were therefore not considered to be of ecological concern.

5.1.3 Sediment Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are industrial chemicals used in electrical equipment. They are manufactured by reacting chlorine with biphenyl resulting in the formation of a complex mixture of compounds (known as congeners). The properties of the final product are modified by varying the proportion of chlorine to biphenyl present. In environmental samples PCBs are therefore present as technical mixtures rather than individual compounds. Polychlorinated biphenyls have entered the marine environment by leakage, discharge, recycling, transboundary influx via major rivers and long-range atmospheric transport (Van Wezel et al., 2000). Although the use of PCBs has been banned for many years, they can persist in marine sediments owing to their resistance to degradation (Geyer et al., 1984).

The PCBs analysed in this study were all below their respective MRVs, with the total concentration of the 7 PCB congeners below the Marine Scotland Guideline Action Levels (AL1 and AL2) for all samples.

5.1.4 Sediment Organotins

Organotin compounds have historically been used in marine antifouling products; however, their use is now prohibited. Environmental monitoring conducted in the vicinity of locations where vessel maintenance was conducted identified a link between these compounds and the disruption of the reproductive capabilities of a number of gastropod species, leading to these compounds being gradually phased out of use during the 1980s and 1990s (OSPAR, 2014).

Since 2003, monitoring of imposex and related effects of TBT in marine snails in OSPAR Regions I, II, III and IV has been undertaken regularly. Although the overall status is

improving, marine snails still show pollution effects from TBT over the large parts of the OSPAR area, especially Regions II, III and IV (OSPAR, 2014).

The environmental persistence and fate of TBT is correlated to the specific characteristics of the aquatic ecosystem such as temperature, salinity, pH, suspended matter, microbial populations, flushing rates, etc. Distribution of TBT among the different environmental compartments is regulated by biological, chemical and physical mechanisms. TBT undergoes degradation to DBT, monobutyltin (MBT) and ultimately inorganic tin in the marine environment through processes such as microbial and UV degradation, becoming progressively less toxic in the process. TBT is broken down very slowly in sediments, particularly those with low oxygen content where persistence is estimated at tens of decades (Dowson et al., 1996; Gadd, 2000).

Concentrations of TBT were below the Marine Scotland AL1 and AL2 across the survey area and were therefore not considered to be of ecological concern.

5.1.5 Limitations and uncertainties

The data provided in this report represent seafloor conditions at the time of sampling only and may change as the result of depositional/erosional processes that can occur on a range of temporal scales. The principal transport pathway by which contaminants enter the benthic environment is by deposition along with fine sediments and, as such, remobilisation and subsequent deposition processes are a major source of natural variation in benthic contaminant levels. As these processes are likely to change over time, this introduces some uncertainty regarding the long-term validity of the data presented in this report. However, the water depths present at the survey area are likely to result in lower remobilisation rates than the more hydrodynamic shallower areas of the North Sea.

Although the number and location of physico-chemical sampling points was designed to identify the range of contaminants within the survey area, it is possible that not all spatial variation in the contaminant concentrations has been captured by the sampling plan. Consequently, there may be locations within the survey area where contaminant levels fall outside of the ranges provided within this report.

A further source of uncertainty in the reported data relates to the sampling and subsampling methodologies utilised (sampling bias). To characterise a station, a single grab sample was acquired, and was subsampled to obtain appropriate quantities of material for analysis. Although rigorous QC procedures were followed for all sampling and subsampling, it is possible that not all subsamples analysed were typical of the locality from which they were collected. Further sampling bias was minimised during the analytical process by either analysing subsamples in their entirety, or by homogenising the sediment prior to further subsampling.

6. Conclusions

The aim of this report has been to evaluate the presence of contaminants in the marine environment within the survey area. A review of the environmental data in context with estimated sediment effects threshold values (Marine Scotland, 2017) was also undertaken. Based on the overall assessment of the survey area, the following key conclusions can be stated:

- All total concentrations of aromatic hydrocarbons, including the US EPA 16 PAHs, were below their respective Marine Scotland Guideline Action Levels (AL1);
- The bioavailable metals concentrations in all samples were below their respective AL1 and AL2;
- The sum of the 7 PCB congeners in all samples was below the AL1 and AL2;
- The TBT concentrations in all samples were below the AL1 and AL2.

7. References

Boening, D.W. (1999). An evaluation of bivalves as biomonitors of heavy metals pollution in marine waters. *Environmental Monitoring and Assessment*, *55*(3), 459-470. https://doi.org/10.1023/A:1005995217901.

Brady, J. P., Ayoko, G. A., Martens, W. N., & Goonetilleke, A. (2015). Development of a hybrid pollution index for heavy metals in marine and estuarine sediments. *Environmental Monitoring and Assessment*, *187*(5), 306. https://doi.org/10.1007/s10661-015-4563-x.

Butler, J. D., Butterworth, V., Kellow, S. C., & Robinson, H. G. (1984). Some observations on the polycyclic aromatic hydrocarbon (PAH) content of surface soils in urban areas. *Science of The Total Environment*, *33*(1–4), 75–85. https://doi.org/10.1016/0048-9697(84)90382-6.

Chester, R. & Voutsinou, F. G. (1981). The initial assessment of trace metal pollution in coastal sediments. *Marine Pollution Bulletin, 12*, 84-91. https://doi.org/10.1016/0025-326X(81)90198-3.

Culotta, L., De Stefano, C., Gianguzza, A., Mannino, M. R., & Orecchio, S. (2006). The PAH composition of surface sediments from Stagnone coastal lagoon, Marsala (Italy). *Marine Chemistry*, *99*(1–4), 117–127. https://doi.org/10.1016/j.marchem.2005.05.010.

Dang, D. H., Lenoble, V., Durrieu, G., Omanović, D., Mullot, J.-U., Mounier, S., & Garnier, C. (2015). Seasonal variations of coastal sedimentary trace metals cycling: Insight on the effect of manganese and iron (oxy)hydroxides, sulphide and organic matter. *Marine Pollution Bulletin*, *92*(1–2), 113–124. https://doi.org/10.1016/j.marpolbul.2014.12.048.

de Orte, M. R., Bonnail, E., Sarmiento, A. M., Bautista-Chamizo, E., Basallote, M. D., Riba, I., DelValls, Á., & Nieto, J. M. (2018). Metal fractionation in marine sediments acidified by enrichment of CO_2: A risk assessment. *Marine Pollution Bulletin*, *131*, 611–619. https://doi.org/10.1016/j.marpolbul.2018.04.072.

Department of Trade and Industry (DTI). (1993). *Conditions for the discharge of oil contaminated cuttings resulting from offshore drilling.* Department of Trade and Industry, Oil and Gas Division.

Dowson, P. H., Bubb, J. M. & Lester, J. N. (1996). Persistence and degradation pathways of tributyltin in freshwater and estuarine sediments. *Estuarine, Coastal and Shelf Science, (42),* 551-562.

Du Laing, G., Rinklebe, J., Vandecasteele, B., Meers, E., & Tack, F. M. G. (2009). Trace metal behaviour in estuarine and riverine floodplain soils and sediments: A review. *Science of The Total Environment*, *407*(13), 3972–3985. https://doi.org/10.1016/j.scitotenv.2008.07.025.

Edwards, N. T. (1983). Polycyclic aromatic hydrocarbons (PAHs) in the terrestrial environment – a review. *Journal of Environmental Quality*, *12*, 427-441. https://doi.org/10.2134/jeq1983.00472425001200040001x.

Gadd, G.M. (2000). Microbial interactions with tributyltin compounds: Detoxification, accumulation, and environmental fate. *Science of The Total Environment 258*(1-2), 119-27. https://doi.org/10.1016/S0048-9697(00)00512-X.

Geyer, H., Freitag, D., & Korte, F. (1984). Polychlorinated biphenyls (PCBs) in the marine environment, particularly in the Mediterranean. *Ecotoxicology and Environmental Safety, 8*, 129-151. https://doi.org/10.1016/0147-6513(84)90056-3.

Haritash, A. K., & Kaushik, C. P. (2009). Biodegradation aspects of polycyclic aromatic hydrocarbons (PAHs): A review. *Journal of Hazardous Materials*, *169*(1–3), 1–15. https://doi.org/10.1016/j.jhazmat.2009.03.137.

Joint Nature Conservation Committee [JNCC]. (n.d.). *Annex I habitats list*. https://sac.jncc.gov.uk/habitat/.

Keith, L. H. (2014). The source of U.S. EPA's Sixteen PAH priority pollutants. *Polycyclic Aromatic Compounds*, *35*(2–4), 147–160. https://doi.org/10.1080/10406638.2014.892886.

Kennicutt, M. C., Brooks, J. M., Bidigare, R. R., & Denoux, G. J. (1988). Gulf of Mexico hydrocarbon seep communities—I. Regional distribution of hydrocarbon seepage and associated fauna. *Deep Sea Research Part A. Oceanographic Research Papers*, *35*(9), 1639–1651. https://doi.org/10.1016/0198-0149(88)90107-0.

Latimer, J.S. & Zheng, J. (2003). The sources, transport and fate of PAHs in the marine environment. In P. E. T. Douben (Ed.) PAHs: An ecotoxicological perspective (pp. 9-29). John Wiley & Sons.

Marine Scotland. 2017. *Pre-disposal Sampling Guidance. Version 2 – November 2017*. https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/02/marine-licensing-applications-and-guidance/documents/guidance/pre-disposal-sampling-guidance/pre-disposal-sampling-guidance/govscot%3Adocument/Pre-disposal%2Bsampling%2Bguidance.pdf.

National Research Council [NRC]. (1983). *Drilling discharges in the marine environment*. National Academy Press.

NatureScot. (2020). *Priority marine features in Scotland's seas – Habitats*. https://www.nature.scot/doc/priority-marine-features-scotlands-seas-habitats.

Neff, J.M. (1979). *Polycyclic aromatic hydrocarbons in the aquatic environment. Sources, fates and biological effects*. Applied Science Publishers.

Oslo and Paris Commission [OSPAR]. (2005). *Assessment of data collected under the co-ordinated environmental monitoring programme (CEMP). Assessment and Monitoring Series.* (OSPAR Publication 2005/235). OSPAR Commission.

Oslo and Paris Commission [OSPAR]. (2008). *OSPAR List of threatened and/or declining species and habitats*. (Reference Number: 2008-06). OSPAR Commission. https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats.

Oslo and Paris Commission [OSPAR] (2014). *Levels and trends in marine contaminants and their biological effects – CEMP assessment report 2013*. *Monitoring and Assessment Series.* OSPAR Publication No. 631/2014). OSPAR Commission.

Páez-Osuna, F., & Ruiz-Fernández, C. (1995). Comparative bioaccumulation of trace metals in Penaeus stylirostris in estuarine and coastal environments. *Estuarine, Coastal and Shelf Science*, *40*(1), 35–44. https://doi.org/10.1016/0272-7714(95)90011-x.

Sims, R. C. & Overcash, M. R. (1983). Fate of polynuclear aromatic compounds (PNAs) in soil-plant systems. *Residue Reviews*, 88, 1-68.

Tessier, A., Campbell, P. G. C., & Bisson, M. (1979). Sequential extraction procedure for the speciation of particulate trace metals. *Analytical Chemistry*, *51*(7), 844–851. https://doi.org/10.1021/ac50043a017.

Van Wezel, A.P., Traas, T.P., Van der Weiden, M.E.J., Crommentuijn, T.H. & Sijm, D.T.H.M. (2000). Environmental risk limits for polychlorinated biphenyls in the Netherlands: Derivation with probabilistic food chain modelling. *Environmental Toxicology and Chemistry, 19*, 2140-2153.

Wakeham, S. G., Schaffner, C., & Giger, W. (1980). Polycyclic aromatic hydrocarbons in recent lake sediments—I. Compounds having anthropogenic origins. *Geochimica et Cosmochimica Acta*, *44*(3), 403–413. https://doi.org/10.1016/0016-7037(80)90040-x.

Wang, Z., Wang, Y., Zhao, P., Chen, L., Yan, C., Yan, Y., & Chi, Q. (2015). Metal release from contaminated coastal sediments under changing pH conditions: Implications for metal mobilization in acidified oceans. *Marine Pollution Bulletin*, *101*(2), 707–715. https://doi.org/10.1016/j.marpolbul.2015.10.026.

Warren, L.A. & Zimmerman, A.P. (1993). Trace metal-suspended particulate matter associations in a fluvial system: Physical and chemical influences. *Particulate and matter and aquatic contaminants* (pp. 127-155). Lewis Publishers.

Youngblood, W. W., & Blumer, M. (1975). Polycyclic aromatic hydrocarbons in the environment: homologous series in soils and recent marine sediments. *Geochimica et Cosmochimica Acta*, *39*(9), 1303–1314. https://doi.org/10.1016/0016-7037(75)90137-4.

Appendices

Appendix A

Guidelines on Use of Report

This report (the "Report") was prepared as part of the services (the "Services") provided by Fugro GB 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.

Fugro's obligations and liabilities to the Client or any other party in respect of the Services and this Report are limited in time and value as defined in Contract (or in the absence of any express provision in the Contract as implied by the law of the Contract) and Fugro provides no other representation or warranty whether express or implied, in relation to the Services or for the use of this Report for any other purpose. Furthermore, Fugro has no obligation to update or revise this Report based on changes in conditions or information which emerge following issue of this Report unless expressly required by the Contract.

The Services were performed by Fugro exclusively for the Client and any other party identified in the Contract for the purpose set out therein. Any use and/or reliance on the Report or the Services for purposes not expressly stated in the Contract, by the Client or any other party is that party's risk and Fugro accepts no liability whatsoever for any such use and/or reliance.

Appendix B

Methodologies

B.1 Survey Methods

B.1.1 Grabs

Seafloor samples were acquired using a 0.1 m^2 dual van Veen (DVV) grab. In areas that contained sediments that were too coarse for the DVV grab to take a successful sample, a mini-Hamon grab (HG) was used instead.

Operational procedures for grab sampling were as follows:

- The 0.1 m^2 DVV grab or mini-Hamon grab was prepared for operations prior to arrival on station. An ultra short baseline (USBL) beacon was attached to the grab frame. The Bridge communicated to the deck via a VHF radio when the vessel was steady and on location, and the grab was deployed from the starboard A-frame;
- When the engineer operating the winch observed that the grab had reached the seafloor (evidenced through a distinct slackening of the wire rope and snatch block), the online surveyor was informed (via VHF radio) and a fix was taken;
- On recovery to the deck, the sample was inspected and judged acceptable or otherwise (see below for rejection criteria);
- One accepted grab sample was retained for faunal analysis and one grab sample was retained and subsampled for physico-chemical analysis;
- Deck logs were completed for each sample acquired (including no samples). The information collected included date, time, sample number, fix number, sediment type, depth and colour of strata in the sediment (if any) using Munsell colour codes, odour (i.e. H_2S), bioturbation or debris.

Samples were considered unacceptable in the following instances:

- Evidence of sediment washout caused through improperly closed grab jaws or inspection hatch;
- Sediment sample taken on an angle, where the grab jaws have not been parallel to the seafloor when the grab fired;
- Disruption of the sample through striking the side of the vessel;
- Sample represented less than approximately 7 cm bite depth of the grab (unless deemed acceptable by the client representative);
- The presence of a hagfish (*Myxine glutinosa*) and/or other mucous coagulants;
- Sample is more than 10 m from the target location (unless deemed acceptable by the client representative);
- Deemed unacceptable by the client representative for any other reason.

B.2 Laboratory Analysis for Sediment Samples

B.2.1 Hydrocarbon Analysis in Sediments

B.2.1.1 General Precautions

To effectively eliminate all possible sources of hydrocarbon contamination from the analysis the following precautionary measures were taken prior to sample work-up:

- All solvents were purchased as high purity grade. Each batch was checked for purity by concentrating approximately 400 mL down to a small volume (< 1 mL) and analysing by gas chromatography (GC);
- All water used was distilled through an all glass still and dichloromethane extracted to minimise contamination from plasticisers;
- All glassware was cleaned using an acid/base machine wash. The glassware was rinsed with acetone then finally with dichloromethane prior to use;
- Procedural blanks, replicate analyses and laboratory reference material were run with each batch.

B.2.1.2 Ultrasonication Extraction for Hydrocarbons in Sediment

Sediment samples were thawed, homogenised and accurately weighed into a 250 mL conical flask. A solution containing an appropriate amount of the following internal standards was added to each sample using a microsyringe.

Aliphatic Standards	Aromatic Standards
Heptamethylnonane	D_8 Naphthalene
D_{34} Hexadecane	D_{10} Acenaphthene
D_{42} Eicosane	D_{10} Phenanthrene
Squalane	D_{10} Pyrene
	D_{12} Chrysene
	D_{12} Perylene

Methanol (50 mL) and solvent were mixed with the sediment. Dichloromethane (DCM; 60 mL) was then added and the sample mixed again. The flasks were then capped with solvent cleaned aluminium foil and ultrasonicated for 30 minutes.

After being allowed to settle the solvent was decanted through a GF-C filter paper into a 1 L separating funnel. The extract was then partitioned with 100 mL of DCM extracted distilled water and the DCM layer run-off into a clean 500 mL round-bottomed flask. The ultrasonic extraction was repeated a further two times using 50 mL DCM and 15 minutes of ultrasonication. Each time the filtered extract was partitioned with the remaining methanol/water in the separating funnel. The DCM extracts were bulked and reduced in volume to approximately 2 mL using a rotary evaporator, then further reduced to approximately 1 mL under a gentle stream of nitrogen prior to clean-up.

Correction factors for wet/dry sediments were obtained by drying a subsample of the homogenised sediment to constant weight at 105 °C.

B.2.1.3 Clean-Up of Extracts by Column Chromatography

Removal of polar material, including lipids was carried out using a silica gel column. The silica gel used was 70 to 230 mesh which was heated at 400 °C for at least 4 hours to remove impurities and residual moisture and then stored at 200 °C prior to use. The sample extract was added to the silica gel column, containing 5 g of adsorbent and eluted with 35 mL of DCM/pentane (1:2). The eluant was reduced in volume using the evaporator to approximately 2 mL, with activated copper powder (for removal of free sulphur), before being further reduced under a gentle stream of nitrogen to an appropriate volume and analysed by both GC and gas chromatography-mass spectrometry (GC-MS).

	Gas Chromatography [GC]	Gas Chromatography-Mass Spectrometry [GC-MS]
Instrument	HP 6890 Series GC with 7673 autoinjector	HP 7890 Series GC with autoinjector and 5977A MSD
Column	100 %-dimethylpolysiloxane bonded fused silica, 60 m, 0.25 µm film thickness, 0.32 mm internal diameter	(5 %phenyl)-methylpolysiloxane bonded fused silica, 60 m, 0.32 µm film thickness 0.25 mm internal diameter
Carrier Gas	Hydrogen (constant flow 3.5 mL/min)	Hydrogen (constant flow 1.4 mL/min)
Injector	On–column (2 µL injection)	Splitless, 280 °C, split flow 40 mL/min, vent time 1.5 min (1 µL injection)
Oven Temperature Programme	80 °C – 2 min 80 °C to 320 °C at 18 °C/min 320 °C – 13 min 320 °C to 350 °C at 30 °C/min	60 °C – 1 min 60 °C to 180 °C at 11 °C/min 180 °C to 260 °C at 6 °C/min 260 °C to 320 °C at 6 °C/min 330 °C – 7 min
Source/Detector Temperature	350 °C (FID)	230 °C
Electron Energy	-	70 eV
Selected Ion Monitoring (SIM)	-	9 groups - 6 ions per group
Dwell Time (per ion)	-	0.035 second

B.2.1.4 Polycyclic Aromatic Hydrocarbons

A full range of polycyclic aromatic hydrocarbon (PAH) and alkylated PAH were quantified as specified by Department of Trade and Industry (DTI) regulations (DTI, 1993).

Calibration was undertaken using a range of PAH standard solutions, a number of alkylated PAH, dibenzothiophene and a range of suitable internal standards. Individual response factors were calculated for each of the compounds present in the calibration solution.

Response factors for the non-calibrated alkylated PAH were taken to be equivalent to closely related compounds. The MRV of individual and alkylated PAHs is 0.1 ng/g.

B.2.2 Polychlorinated Biphenyls (PCBs)

B.2.2.1 Accelerated Solvent Extraction Procedure

Polychlorinated biphenyls (PCBs) are extracted from sediment and soil samples using accelerated solvent extraction using a hexane/acetone (2:1, v/v) as the extraction solvent. Accelerated solvent extraction cells were prepared with 10 g sodium sulphate and 10 g 5 % deactivated alumina. Sediment samples were accurately weighed into cells, a known quantity of hexabromobiphenyl added as internal standard and extracted using an ASE 350. The ASE instrument parameters are shown in the following table.

Solvent	Hexane:acetone (2:1, v/v)
Extraction Temperature	100 °C
Pressure	1500 psi
Pre-heat Time	2 min
Cell Heat Time	5 min
Static Time	5 min
Flush Volume	60 %
Purge Time	60 secs
Cycles	4

B.2.2.2 Clean-up of Sediment Extracts by Column Chromatography

Sample extracts are cleaned up by column chromatography using 40 % (w/w) acid silica. The silica gel used was 70 to 230 mesh, muffled at 400 °C for at least 4 hours to remove impurities and activate it then stored at 200 °C. Prior to use, acid silica is prepared by the addition of sulphuric acid to silica. The sediment extract was added to the silica gel column, containing 5 g of adsorbent and eluted with 30 mL of hexane. The eluent was reduced in volume using the evaporator to approximately 2 mL before being further reduced under a gentle stream of nitrogen to an appropriate volume, approximately 1 g of activated copper powder (for removal of free sulphur) before being concentrated to 0.5 mL for analysis.

B.2.2.3 GC-MS Analysis of ICES 7 PCBs

Sample extracts were analysed by GC-MS for the Dutch 7 Congeners (PCBs 28, 52, 101, 118, 138, 153 and 180). The instrument parameters are shown in the following table:

	Gas Chromatography-Mass Spectrometry [GC-MS]
Instrument	HP 7890 Series GC with autoinjector and 5977B HES MSD
Column	(5 %phenyl)-methylpolysiloxane bonded fused silica, 30 m, 0.25 µm film thickness 0.25 mm internal diameter
Carrier Gas	Hydrogen (constant flow 1.3 mL/min)
Injector	Splitless, 280 °C, split flow 30 mL/min, vent time 1.5 min (2 µL injection)
Oven Temperature Programme	60 °C – 1 min 60 °C to 320 °C at 10 °C/min 320 °C – 8 min
Source/Detector Temperature	250 °C
Electron Energy	70 eV
Selected Ion Monitoring (SIM)	1 group - 11 ions
Dwell Time (per ion)	0.035 second

B.2.3 Organotins

B.2.3.1 Ultrasonic Extraction Procedure

Sediment samples were thawed, homogenised and accurately weighed into a 125 mL conical flask. A solution containing an appropriate amount of the internal standard (containing monoheptyltin, diheptyltin and tripropyltin) was added to each sample. Extraction solvent (acetic acid:methanol:water (1:1:1, v:v:v)) was added and the sample mixed again. The flasks were then capped with solvent cleaned aluminium foil and ultrasonicated for 30 minutes. The slurry was transferred to a centrifuge tube and centrifuged to separate the liquid and solid phases. The ultrasonication and centrifugation steps were repeated one further time. The two extraction solutions were combined, mixed and the pH adjusted to approximately 4.5 using a sodium hydroxide solution. The extract solution was derivatised using 5 % (w/v) sodium tetraethylborate in water solution, the solution left for 30 minutes before 5 mL of hexane was added. The solutions were mixed, left to separate and the hexane layer transferred to a 12 mL vial. The derivatisation step was repeated and a further 5 mL of hexane added. The hexane layers were combined and blown down to 1 mL.

B.2.3.2 Clean-up of Sediment Extracts by Column Chromatography

Sample extracts are cleaned up by column chromatography using 3 % de-activated silica. The silica gel used was 70 mesh to 230 mesh, muffled at 400 °C for at least 4 hours to remove impurities and activate it then stored at 200 °C. Prior to use, silica is deactivated by the addition of distilled water. The sediment extract was added to the silica gel column, containing 5 g of adsorbent and eluted with 30 mL of hexane/dichloromethane (4:1, v:v). The eluent was reduced in volume using the evaporator to approximately 2 mL before being further reduced under a gentle stream of nitrogen to an appropriate volume approximately

1 g of activated copper powder (for removal of free sulphur) before being concentrated to 0.5 mL for analysis.

B.2.3.3 GC-MS Analysis of Organotins

Sample extracts are analysed by GC-MS using selected ion monitoring for monobutyltin, dibutyltin, and tributyltin. The instrument parameters are shown on the following table.

	Gas Chromatography-Mass Spectrometry [GC-MS]
Instrument	HP 7890 Series GC with autoinjector and 5977B HES MSD
Column	(5 %phenyl)-methylpolysiloxane bonded fused silica, 30 m, 0.25 µm film thickness 0.25 mm internal diameter
Carrier Gas	Hydrogen (constant flow 1.3 mL/min)
Injector	Splitless, 280 °C, split flow 50 mL/min, vent time 1.0 min (2 µL injection)
Oven Temperature Programme	60 °C – 1 min 60 °C to 240 °C at 13 °C/min 240 °C to 320 °C at 45 °C/min 320 °C – 6 min
Source/Detector Temperature	250 °C
Electron Energy	70 eV
Selected Ion Monitoring (SIM)	3 groups - 6 ions per group
Dwell Time (per ion)	0.030 second

B.2.4 Heavy and Trace Metals in Sediments

Heavy and trace metal content was determined by Fugro. Sediment samples were dried at 40 °C and then sieved to the required size fraction (2000 µm). Samples were subjected to an aqua regia microwave digestion. This acid mixture allows a partial dissolution of metals, predominately releasing those associated with the sediment fines. The resulting digests were then analysed by inductively coupled plasma–mass spectrometry (ICP-MS) for arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc. and inductively coupled plasma-optical emission spectrometry (ICP-OES) for aluminium and iron.

Appendix C

Logs

C.1 Survey Log

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	00:35:54	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	14:18:47	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	20:52:35	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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		
17/10/2023	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	21:31:26	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	01:29:56	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	06:58:28	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	11:22:26	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	10:31:59	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	
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	

Geodetic Parameters: ETRS89, UTM Zone 30N CM 3° W [m]												
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	12:50:06	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	

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	10:35:51	MCW-A-ST14	PC	173	12	12	S	Sand	2.5Y 5/3	
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	

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	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 *A. islandica*
13/09/2023	06:52:02	MCW-C-ST53	NS	348	0	0	-	-	-	Shells in jaws, washout
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	*A. islandica* 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	Sandeels 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	*A. islandica* in jaws (crushed)
17/09/2023	03:56:36	MCW-C-ST62	NS	466	0	0	S	Sand	2.5Y 4/3	*A. islandica* 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	*A. islandica* shells in jaw, sample washout. Live *A.islandica* 9.8cm (returned to sea)
17/09/2023	05:39:59	MCW-C-ST71	NS	481	11	11	S	Sand	2.5Y 4/3	*A. islandica* in jaws (crushed) and live *A.islandica* 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	

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	05:53:26	MCW-C-ST71	NS	482	0	0	S	Sand	2.5Y 4/3	*A. islandica* in jaws, sample washout
17/09/2023	06:11:16	MCW-C-ST71	FA	483	11	11	S	Sand	2.5Y 4/3	*A.islandica* 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 *A. islandica* in jaws and live *A.islandica* 10cm (returned to sea)
17/09/2023	08:51:17	MCW-C-ST70	FA	498	13	13	S	Sand	2.5Y 4/3	
17/09/2023	08:51:17	MCW-C-ST70	PC	498	11	11	S	Sand	2.5Y 4/3	*A.islandica* 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 *A.islandica* - 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	

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	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	
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	

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	
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	
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	

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	
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

Appendix D

Sediment Hydrocarbon Analysis

D.1 Aromatic Hydrocarbon Concentrations

D.1.1 Total 2 to 6 Ring PAH Concentrations

PAH	Station								
	MCW-A-ST02	MCW-A-ST05	MCW-A-ST08A	MCW-A-ST12	MCW-A-ST14	MCW-A-ST22	MCW-A-ST34	MCW-A-ST36	MCW-A-ST55
Naphthalene (128)	1.2	0.4	0.3	0.4	0.2	0.8	0.4	0.2	0.5
C1 128	3.5	1.0	0.7	1.0	0.4	2.1	0.8	0.3	1.1
C2 128	4.5	1.6	1.1	1.4	0.8	2.7	1.2	0.6	1.8
C3 128	4.2	1.7	1.0	1.5	0.8	2.8	1.2	0.6	1.4
C4 128	2.6	1.0	0.6	1.0	0.5	1.8	0.7	0.6	0.9
TOTAL 128	**16.0**	**5.7**	**3.7**	**5.3**	**2.7**	**10.2**	**4.3**	**2.3**	**5.7**
Phenanthrene/anthracene (178)	2.5	1.0	0.5	0.9	0.3	1.4	0.8	0.2	0.9
C1 178	3.9	1.5	0.7	1.2	0.4	2.2	1.0	0.4	1.2
C2 178	4.6	1.9	0.9	1.6	0.6	3.0	1.2	0.4	1.6
C3 178	3.3	1.7	0.8	1.5	0.8	2.1	1.1	0.6	1.4
TOTAL 178	**14.3**	**6.1**	**2.9**	**5.2**	**2.1**	**8.7**	**4.1**	**1.6**	**5.1**
Dibenzothiophene (DBT)	0.2	0.1	< 0.1	0.1	< 0.1	0.1	0.1	< 0.1	0.1
C1 184	0.3	0.2	0.1	0.1	0.1	0.2	0.1	< 0.1	0.1
C2 184	0.3	0.3	0.1	0.3	0.1	0.3	0.2	0.1	0.2
C3 184	0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.2
TOTAL 184	**1.1**	**0.8**	**< 0.4**	**0.7**	**< 0.5**	**0.9**	**0.6**	**< 0.4**	**0.6**
Fluoranthene/pyrene (202)	4.7	2.1	1.2	1.9	1.0	3.1	1.7	0.8	2.0
C1 202	2.0	0.9	0.4	0.7	0.3	1.4	0.6	0.3	0.6
C2 202	1.6	0.8	0.4	0.6	0.3	1.1	0.5	0.2	0.6
C3 202	1.7	0.8	0.5	0.7	0.4	1.0	0.7	0.4	0.7
TOTAL 202	**10.0**	**4.6**	**2.5**	**3.9**	**2.0**	**6.6**	**3.5**	**1.7**	**3.9**
Benzanthracenes/benzphenanthrenes (228)	4.6	2.0	1.1	1.6	0.8	2.5	1.3	0.7	1.4
C1 228	2.3	1.1	0.5	0.9	0.4	1.4	0.7	0.3	0.7
C2 228	2.9	1.2	0.7	1.2	0.9	1.8	1.0	0.7	0.8
TOTAL 228	**9.8**	**4.3**	**2.3**	**3.7**	**2.1**	**5.7**	**3.0**	**1.7**	**2.9**
m/z 252	14.9	6.5	2.8	5.5	2.2	8.0	4.0	1.7	3.8
C1 252	4.4	2.2	1.6	2.1	1.3	3.1	1.7	1.0	1.5
C2 252	3.0	1.5	1.0	1.3	1.2	1.5	1.1	1.1	1.0
TOTAL 252	**22.3**	**10.2**	**5.4**	**8.9**	**4.7**	**12.6**	**6.8**	**3.8**	**6.3**
m/z 276	5.5	3.0	1.8	3.7	1.8	5.4	2.5	1.4	2.3
C1 276	2.3	1.4	1.2	1.3	2.1	1.7	1.2	1.4	1.2
C2 276	2.1	1.4	1.4	1.6	2.6	1.4	1.4	1.6	1.6
TOTAL 276	**9.9**	**5.8**	**4.4**	**6.6**	**6.5**	**8.5**	**5.1**	**4.4**	**5.1**
NPD	**31.4**	**12.6**	**< 7.0**	**11.2**	**< 5.3**	**19.8**	**9.0**	**< 4.3**	**11.4**
% NPD	**38**	**34**	**< 33**	**33**	**< 26**	**37**	**33**	**< 28**	**39**
Total 2 to 6 Ring PAH	**83.4**	**37.5**	**< 21.6**	**34.3**	**< 20.6**	**53.2**	**27.4**	**< 15.9**	**29.6**

PAH	Station					
	MCW-B-ST18A	MCW-B-ST28	MCW-B-ST30A	MCW-B-ST38A	MCW-B-ST57	MCW-B-ST59A
Naphthalene (128)	0.5	0.6	0.3	0.9	0.2	0.9
C1 128	1.2	1.9	0.6	2.5	0.6	2.7
C2 128	1.7	2.3	0.9	3.5	1.1	3.7
C3 128	1.8	2.6	1.0	3.3	1.0	3.7
C4 128	1.1	1.5	0.7	1.6	0.8	2.2
TOTAL 128	**6.3**	**8.9**	**3.5**	**11.8**	**3.7**	**13.2**
Phenanthrene/anthracene (178)	1.0	1.3	0.5	1.6	0.4	2.2
C1 178	1.5	1.9	0.7	2.6	0.6	3.4
C2 178	1.8	2.6	1.0	3.2	0.8	4.4
C3 178	1.5	2.3	1.0	2.4	0.8	2.8
TOTAL 178	**5.8**	**8.1**	**3.2**	**9.8**	**2.6**	**12.8**
Dibenzothiophene (DBT)	0.1	0.1	0.1	0.1	< 0.1	0.2
C1 184	0.2	0.2	0.1	0.2	0.1	0.2
C2 184	0.2	0.3	0.2	0.3	0.1	0.3
C3 184	0.2	0.2	0.1	0.2	0.1	0.2
TOTAL 184	**0.7**	**0.8**	**0.5**	**0.8**	**< 0.4**	**0.9**
Fluoranthene/pyrene (202)	2.4	2.9	1.3	3.6	0.8	3.4
C1 202	0.8	1.0	0.5	1.3	0.3	1.6
C2 202	0.6	0.9	0.4	1.2	0.4	1.7
C3 202	0.8	1.0	0.5	1.2	0.3	1.2
TOTAL 202	**4.6**	**5.8**	**2.7**	**7.3**	**1.8**	**7.9**
Benzanthracenes/benzphenanthrenes (228)	2.1	2.3	1.1	2.5	0.7	3.2
C1 228	1.0	1.3	0.6	1.4	0.4	1.9
C2 228	1.3	1.8	0.9	2.0	0.5	2.1
TOTAL 228	**4.4**	**5.4**	**2.6**	**5.9**	**1.6**	**7.2**
m/z 252	6.9	7.9	3.1	7.3	2.1	10.2
C1 252	2.4	2.7	1.2	2.9	0.7	3.4
C2 252	1.7	1.8	1.0	1.8	0.5	1.8
TOTAL 252	**11.0**	**12.4**	**5.3**	**12.0**	**3.3**	**15.4**
m/z 276	2.8	5.9	2.9	5.9	1.7	8.6
C1 276	1.7	1.7	1.1	1.7	0.6	2.2
C2 276	2.0	1.2	0.9	2.1	1.0	2.6
TOTAL 276	**6.5**	**8.8**	**4.9**	**9.7**	**3.3**	**13.4**
NPD	**12.8**	**17.8**	**7.2**	**22.4**	**< 6.7**	**26.9**
% NPD	**33**	**35**	**32**	**39**	**< 41**	**38**
Total 2 to 6 Ring PAH	**39.3**	**50.2**	**22.7**	**57.3**	**< 16.7**	**70.8**

PAH	Station						
	MCW-C-ST42	MCW-C-ST51	MCW-C-ST63	MCW-C-ST70	MCW-C-ST75	MCW-C-ST77	MCW-C-ST92
Naphthalene (128)	0.3	0.6	0.5	0.4	0.4	0.3	0.1
C1 128	0.8	2.2	1.1	1.1	1.1	0.8	0.2
C2 128	1.2	3.2	2.2	1.7	1.7	1.1	0.5
C3 128	1.1	3.1	2.1	1.4	1.7	1.0	0.6
C4 128	0.8	1.9	1.1	1.0	1.1	0.8	0.8
TOTAL 128	**4.2**	**11.0**	**7.0**	**5.6**	**6.0**	**4.0**	**2.2**
Phenanthrene/anthracene (178)	0.5	1.2	1.0	0.9	0.8	0.5	0.2
C1 178	0.8	1.9	1.6	1.3	1.3	0.9	0.4
C2 178	1.2	2.4	2.0	1.9	1.6	1.1	0.6
C3 178	0.9	2.0	1.5	1.2	1.0	0.8	0.6
TOTAL 178	**3.4**	**7.5**	**6.1**	**5.3**	**4.7**	**3.3**	**1.8**
Dibenzothiophene (DBT)	< 0.1	0.1	0.1	0.1	< 0.1	< 0.1	< 0.1
C1 184	0.1	0.2	0.1	0.1	0.1	0.1	0.1
C2 184	0.1	0.2	0.2	0.2	0.1	0.1	0.1
C3 184	0.1	0.3	0.2	0.2	0.2	0.2	0.1
TOTAL 184	**< 0.4**	**0.8**	**0.6**	**0.6**	**< 0.5**	**< 0.5**	**< 0.4**
Fluoranthene/pyrene (202)	1.0	2.0	1.7	1.7	1.4	1.2	0.5
C1 202	0.4	1.1	0.7	0.7	0.6	0.5	0.2
C2 202	0.6	1.1	0.8	0.8	0.6	0.6	0.2
C3 202	0.3	0.7	0.5	0.6	0.5	0.3	0.2
TOTAL 202	**2.3**	**4.9**	**3.7**	**3.8**	**3.1**	**2.6**	**1.1**
Benzanthracenes/benzphenanthrenes (228)	0.8	1.8	1.5	1.4	1.3	1.0	0.5
C1 228	0.6	1.0	0.9	0.9	0.8	0.6	0.3
C2 228	0.6	1.3	1.1	1.0	0.9	0.7	0.5
TOTAL 228	**2.0**	**4.1**	**3.5**	**3.3**	**3.0**	**2.3**	**1.3**
m/z 252	2.3	6.0	5.0	4.9	3.7	3.1	1.3
C1 252	0.8	1.9	1.9	1.7	1.4	1.0	0.6
C2 252	0.5	1.2	0.9	0.8	0.7	0.6	0.4
TOTAL 252	**3.6**	**9.1**	**7.8**	**7.4**	**5.8**	**4.7**	**2.3**
m/z 276	1.8	5.6	4.6	3.7	2.8	3.0	1.4
C1 276	1.0	1.5	1.2	1.0	1.1	1.0	0.9
C2 276	1.2	2.0	1.5	1.6	1.3	1.0	1.5
TOTAL 276	**4.0**	**9.1**	**7.3**	**6.3**	**5.2**	**5.0**	**3.8**
NPD	**< 8.0**	**19.3**	**13.7**	**11.5**	**< 11.2**	**< 7.8**	**< 4.4**
% NPD	**< 41**	**42**	**38**	**36**	**< 40**	**< 35**	**< 35**
Total 2 to 6 Ring PAH	**< 19.9**	**46.5**	**36.0**	**32.3**	**< 28.3**	**< 22.4**	**< 12.9**

PAH	Station						
	MCW-D-ST80	MCW-D-ST82	MCW-D-ST86	MCW-D-ST95A	MCW-D-ST100A	MCW-D-ST104	MCW-D-ST108A
Naphthalene (128)	0.5	0.3	0.2	0.1	0.1	0.4	0.2
C1 128	1.7	0.6	0.4	0.1	0.2	0.8	0.5
C2 128	2.4	0.9	0.7	0.3	0.4	1.2	1.0
C3 128	2.6	1.0	1.0	0.6	0.4	1.3	0.9
C4 128	1.7	0.7	0.6	0.5	0.3	0.8	0.5
TOTAL 128	**8.9**	**3.5**	**2.9**	**1.6**	**1.4**	**4.5**	**3.1**
Phenanthrene/anthracene (178)	1.2	0.4	0.3	0.1	0.2	0.6	0.4
C1 178	2.0	0.6	0.4	0.2	0.3	1.0	0.7
C2 178	2.5	0.9	0.7	0.4	0.4	1.1	0.8
C3 178	1.7	0.7	0.5	0.4	0.4	0.9	0.6
TOTAL 178	**7.4**	**2.6**	**1.9**	**1.1**	**1.3**	**3.6**	**2.5**
Dibenzothiophene (DBT)	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
C1 184	0.1	0.1	0.1	< 0.1	0.1	0.1	0.1
C2 184	0.2	0.1	0.1	0.1	0.1	0.1	0.1
C3 184	0.1	0.1	0.1	0.1	0.1	0.1	< 0.1
TOTAL 184	**0.5**	**< 0.4**	**< 0.4**	**< 0.4**	**< 0.4**	**0.4**	**< 0.4**
Fluoranthene/pyrene (202)	2.1	0.9	0.8	0.6	0.2	0.8	0.6
C1 202	1.0	0.4	0.3	0.1	0.1	0.5	0.3
C2 202	1.0	0.5	0.3	0.2	0.2	0.4	0.3
C3 202	0.6	0.3	0.2	0.2	0.2	0.5	0.3
TOTAL 202	**4.7**	**2.1**	**1.6**	**1.1**	**0.7**	**2.2**	**1.5**
Benzanthracenes/benzphenanthrenes (228)	1.7	0.7	0.5	0.2	0.4	1.1	0.7
C1 228	1.1	0.5	0.3	0.2	0.2	0.5	0.4
C2 228	1.1	0.5	0.4	0.2	0.3	0.6	0.5
TOTAL 228	**3.9**	**1.7**	**1.2**	**0.6**	**0.9**	**2.2**	**1.6**
m/z 252	5.5	2.0	1.6	0.8	1.0	2.3	1.7
C1 252	1.7	0.6	0.7	0.4	0.4	0.8	0.6
C2 252	0.9	0.4	0.3	0.2	0.5	0.7	0.6
TOTAL 252	**8.1**	**3.0**	**2.6**	**1.4**	**1.9**	**3.8**	**2.9**
m/z 276	4.7	2.1	1.9	0.9	0.8	1.4	1.3
C1 276	1.3	0.8	0.5	0.6	0.4	0.7	0.6
C2 276	1.7	1.1	1.2	0.8	0.6	0.8	0.6
TOTAL 276	**7.7**	**4.0**	**3.6**	**2.3**	**1.8**	**2.9**	**2.5**
NPD	**16.8**	**< 6.5**	**< 5.2**	**< 3.1**	**< 3.1**	**8.5**	**< 6.0**
% NPD	**41**	**< 38**	**< 37**	**< 37**	**< 37**	**43**	**< 42**
Total 2 to 6 Ring PAH	**41.2**	**< 17.3**	**< 14.2**	**< 8.5**	**< 8.4**	**19.6**	**< 14.5**

Notes
* = m/z 252 - benzfluoranthenes/benzpyrenes/perylene
† = m/z 276 - anthanthrene/indenopyrenes/benzperylenes
‡ = NPD - naphthalenes, phenanthrenes and dibenzothiophenes (totals)
Concentrations expressed as ng/g dry sediment


ScottishPower
Renewables