Natural England Commissioned Report NECR310

The Needles MCZ 2018 Survey Report

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Foreword

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

Following designation, Natural England started a baseline monitoring programme across all marine protected areas.

This report was commissioned as part of an inshore benthic marine survey of The Needles MCZ.

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Further information
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The Needles MCZ 2018 Survey Report

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Table of Contents

Tables

Figures

1. Introduction

Following the introduction of the Marine and Coastal Access Act in 2009, the UK Government is creating an ecologically coherent network of Marine Conservation Zones (MCZs) in British waters. The MCZ network will exist alongside other Marine Protected Areas (MPAs), including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs) and Ramsar sites to help conserve marine biodiversity, in particular habitats and species of national importance.

Forming part of this network, The Needles MCZ was formally designated on the 17th January 2016[1]. The site has been created to protect seven Broadscale Habitats (BSH), three Habitat Features of Conservation Interest (FOCI) including Seagrass Beds and three Species FOCI: Stalked Jellyfish (*Lucernariopsis campanulata*), Peacock's Tail (*Padina pavonica*), Native Oyster (*Ostrea edulis*) (Table 1). Following designation, Natural England* have started a programme of monitoring and the initial datasets gathered will be used, along with all other available information, to assess the condition of the features in the site using Natural England marine condition assessment methodology. The method uses attributes set out in the sites supplementary advice on conservation objectives to form an overall decision about the condition of the features, and this work will inform the assessment of specific attributes. The results from the condition assessment will inform future monitoring planning and management of the site.

*inshore Statutory Nature Conservation Body

1.1 Site Description

The Needles MCZ is an inshore site that covers the stretch of Solent adjacent to the North West side of the Isle of Wight to just south of the Needles, and includes a series of sheltered bays. This site covers an area of 11 km² (Defra, 2016). The MCZ overlaps slightly with the South Wight Maritime SAC to the south. The Solent Maritime SAC is located to the north of the MCZ (Figure 1). The site protects a number of rare and fragile habitats including Subtidal Chalk sea bed, shallow water (infralittoral) rock and soft sediments which support communities of algae, sponges, sea squirts and

[1] This report was produced before the Tranche 3 designation announcement on 31st May 2019 and as such all content was correct at the time of writing.

anemones (Defra, 2016). It is a highly productive area and an important spawning and nursery area for a range of fish species (Defra, 2016).

The site protects regionally important Seagrass Beds in both Totland and Colwell Bays. This delicate habitat is important for the Native Oyster *(Ostrea edulis*), which has declined in numbers across the UK in recent years (Defra, 2016).

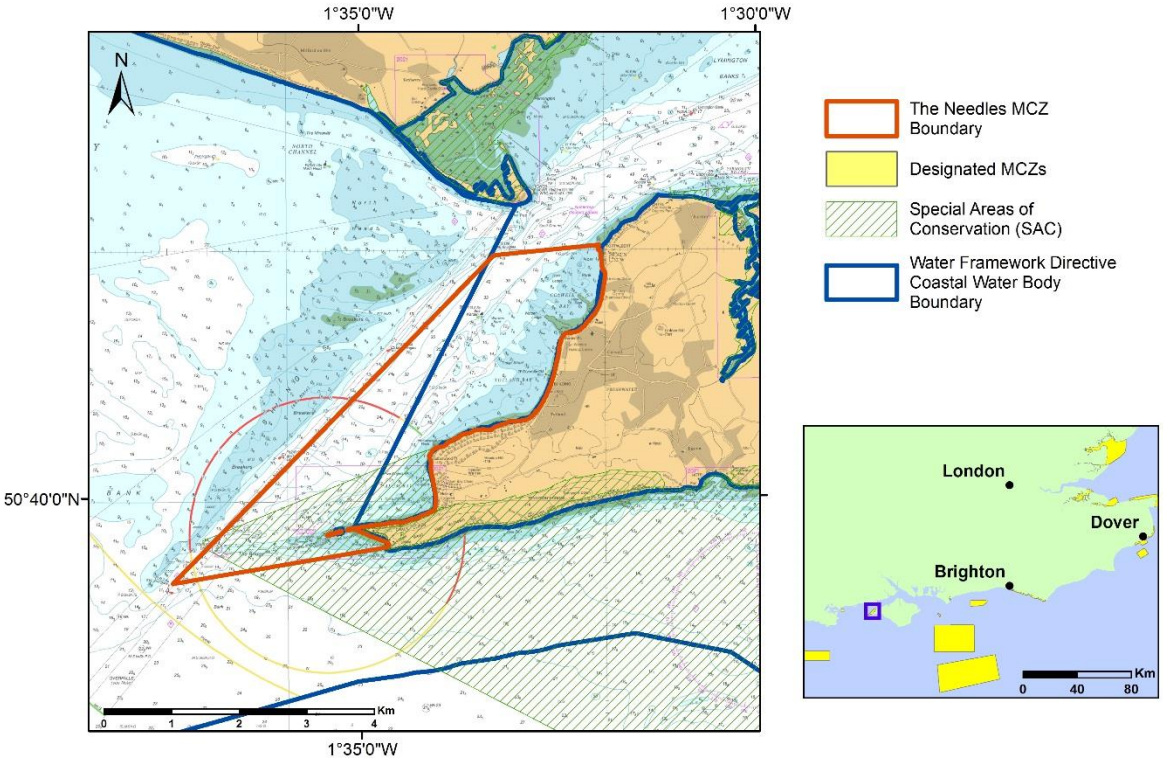


Figure 1. Location of The Needles Marine Conservation Zone (MCZ) in the context of other MCZs off the south of England.

The Features of Conservation Importance (FOCI) protected under the MCZ designation order are presented in Table 1 alongside the general management approach for each. The survey described here focuses on those features indicated by blue shading (Table 1). The Southern Inshore Fisheries and Conservation Authority (IFCA) manage numerous byelaws and voluntary agreements to protect sensitive MPA features from the detrimental effects of bottom-towed fishing gear, potting, and dredging for clams and oysters. Further information can be found on the Southern IFCA's website: http://www.southern-ifca.gov.uk/.

Table 1. Designation status and the current General Management Approach (GMA) for the Features Of Conservation Importance (FOCI) present in The Needles Marine Conservation Zone. The survey described here focuses on those features indicated by blue shading.

Feature Type	Features Present	Designated	GMA
Broadscale Habitat	Moderate energy infralittoral rock	✓	Maintain
	High energy infralittoral rock	✓	Maintain
	Moderate energy circalittoral rock	✓	Maintain
	Subtidal coarse sediment	✓	Recover
	Subtidal sand	✓	Recover
	Subtidal mud	✓	Recover
	Subtidal mixed sediments	✓	Recover
Habitat FOCI	Seagrass Beds	✓	Recover
	Sheltered Muddy Gravels	✓	Recover
	Subtidal Chalk	✓	Recover
Species FOCI	Stalked Jellyfish (*Lucernariopsis campanulata*)	✓	Maintain
	Peacock's Tail (*Padina pavonica*)	✓	Recover
	Native Oyster (*Ostrea edulis*)	✓	Recover

1.2 Survey Aim and Objectives

To undertake a survey of nine of The Needles MCZ designated features (Table 1) to obtain new evidence which can be used by Natural England, alongside all other relevant information, to detect change over time and ascribe condition to inform future monitoring and management measures.

Objective 1:

A grab survey of designated subtidal sediment features ('A5.1 Subtidal mixed sediments', 'A5.2 Subtidal sand', 'A5.1 Subtidal coarse sediment', 'A5.3 Subtidal mud') within the MCZ site.

Incidental records of the Species FOCI Native Oyster (*Ostrea edulis*) will also be recorded if found during the grab survey.

Objective 2:

A camera survey of the designated subtidal rock features ('A1.2 Moderate energy infralittoral rock', 'A3.1 High energy infralittoral rock' and 'A4.2 Moderate energy circalittoral rock') and Subtidal Chalk Habitat FOCI within the MCZ site.

Objective 3:

Groundtruthing survey (camera and grab) of the Freshwater Bay Area of Interest in the South Wight Maritime SAC in order to improve evidence of the Annex I Reef feature and subsequent Southern IFCA management measures.

1.3 Survey Team

The Needles MCZ survey took place between the 2nd July and 5th November 2018. The survey team comprised marine monitoring specialists from the Environment Agency and Natural England. The coastal survey vessel *Solent Guardian,* staffed and operated by Briggs Marine (Figure 2, Annex 7.1) was used to conduct the survey work reported here.

Figure 2. Coastal survey vessel *Solent Guardian,* operated by Briggs Marine.

2. Survey Design and Methods

2.1 Survey Design and Planning Phase

Objective 1: A grab survey of 'A5.4 Subtidal mixed sediments', 'A5.1 Subtidal coarse sediment', 'A5.2 Subtidal sand' and 'A5.3 Subtidal mud' features within the MCZ site.

The 2014 verification grab survey found 'A5.4 Subtidal mixed sediments', 'A5. 2 Subtidal sand' and 'A5.1 Subtidal coarse sediment' throughout the site.

For 'A5.4 Subtidal mixed sediments', infauna data collected from the 2014 survey were used for power analysis to assess the number of samples required for the 2018 survey. Power analysis determined that 30 grab samples were required to assess a 20% change in taxa richness at 80% power (P <0.05). To ensure an adequate number of samples were obtained to effectively assess change over time, 35 grab stations in total were selected to target mapped 'A5.4 Subtidal mixed sediments' (Figure 3). Twelve historical stations where 'A5.4 Subtidal mixed sediments' were collected in 2014 were resampled for the 2018 survey. All grab station locations were chosen based on the Broadscale Habitat map generated by the 2014 verification survey (Arnold et al. 2014; Mylroie et al. 2015). A Before-After Control-Impact (BACI) survey was not considered suitable, due to a lack of comparable habitat outside the MCZ boundary.

For 'A5.1 Subtidal coarse sediment', power analysis showed that detecting change in taxa richness would require an unfeasible number of samples. This could be due to the coarse sediment in the site being split across three distinct areas (inshore bays, offshore ridge, south-west corner), each with varying environmental conditions. Instead**,** 23 Mini-Hamon Grab stations were placed across these areas, to characterise habitat thought to be coarse sediment but not sampled in the 2014 survey (Figure 3). Eight of these stations surveyed originally in 2014 were resampled.

'A5.2 Subtidal sand' was only recorded from a single grab station in the 2014 survey (NDLS71). Three grab stations were plotted within areas identified as sand in the 2014 interpreted Broadscale Habitat map (Figure 3). These stations were requested to be checked for the presence of subtidal Seagrass Beds before grabbing, due to the historical presence of Seagrass Beds in this area.

'A5.3 Subtidal mud' was only observed in five still images from the 2014 verification camera survey in Totland Bay. Four grab stations (NDLS41-44; Figure 3) were positioned to target the 'A5.3 Subtidal mud' location. These stations were requested to be checked for the presence of subtidal Seagrass Beds before grabbing, due to the historical presence of Seagrass Beds in this area.

In total, 65 grab stations were selected for Objective 1. Six stations were also selected (from the stations positioned to target 'A5.4 Subtidal mixed sediments') for sediment contaminant analysis (heavy metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, tributyltin) inside the MCZ boundary (NDLS37, 49, 51, 54, 59 and 61).

Native Oyster (*Ostrea edulis*) has been repeatedly recorded in the southeast of the MCZ, although none were observed during the 2014 verification survey. Only incidental records of their occurrence were recorded in the grab samples during this survey.

Objective 2: A camera survey of 'A3.2 Moderate energy infralittoral rock', 'A3.1 High energy infralittoral rock', 'A4.2 Moderate energy circalittoral rock and Subtidal Chalk.

During the 2014 verification survey, 'A3.2 Moderate energy infralittoral rock' was found in approximately a tenth of the site and 'A4.2 Moderate energy circalittoral rock' was found in a few isolated north-facing slopes of rock ridge outcrops at the north of the Needles. 'A4.1 High energy circalittoral rock' was identified in the 2014 verification survey but only in localised areas of high wave and tidal current so was not mapped (Mylroie et al. 2015).

While 12 still images were identified as 'A3.2 Moderate energy infralittoral rock' from the 2014 camera survey, most of the 0.97 km^2 identified as infralittoral rock from the interpreted habitat map was not sampled during the verification survey. Power analysis was therefore not conducted. Instead, camera stations were positioned over areas mapped as 'A3.2 Moderate energy infralittoral rock' and 'A4.2 Moderate energy circalittoral rock' from the verification survey (Figure 3) (Arnold et al. 2014; Mylroie et al. 2015). These stations were selected using expert judgement and knowledge of previous inshore MCZ infralittoral and shallow circalittoral rock surveys. With the lack of information about the presence of rock outside the MCZ (except in the South Wight Maritime SAC to the south), a BACI style survey approach was rejected for these rock feature.

Due to the localised presence and lack of mapping of 'A4.1 High energy circalittoral rock', only incidental records of this feature's occurrence were recorded during the camera survey.

The Subtidal Chalk Habitat FOCI was only recorded from a single still image in the 2014 survey (Arnold et al., 2014). This camera station was repeated in 2018 (NDLS05). Camera stations were also selected from areas where Subtidal Chalk had been observed by the Southern IFCA (NDLS01-04 and 11-15). A total of 30 camera stations were selected to address Objective 2.

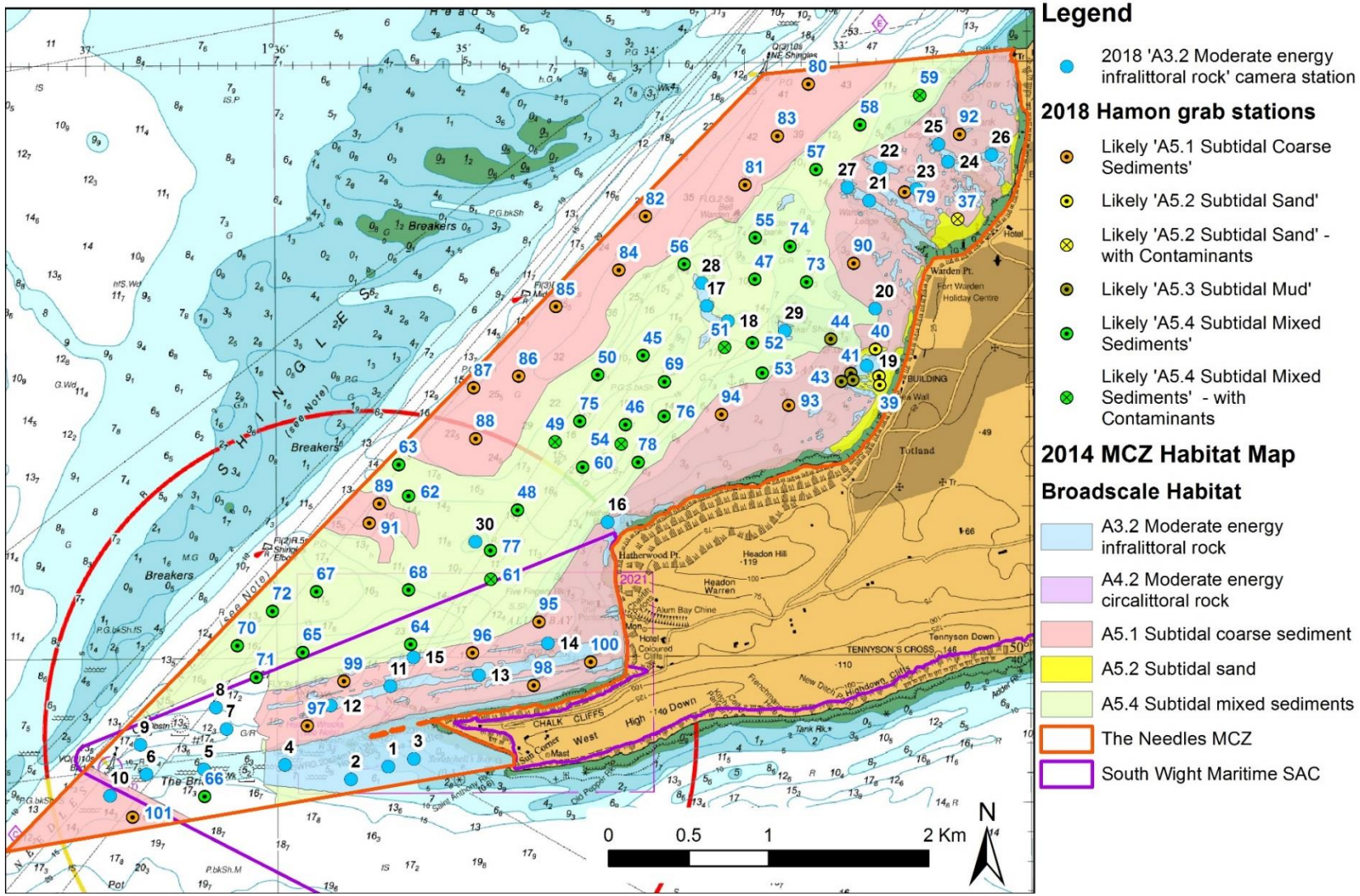


Figure 3. Location of camera and grab stations selected for the 2018 survey of The Needles Marine Conservation Zone.

Objective 3: Characterisation of the Freshwater Bay Area of Interest

Additional groundtruthing was undertaken in Freshwater Bay, within the South Wight Maritime SAC, in order to improve confidence in the existing feature data for Annex I Reef. Six camera stations (NDLS31-36) were plotted in a 2.04 km^2 area of the SAC off Freshwater Bay (Figure 4) for initial survey. If these stations were deemed to be sediment suitable for grabbing, a PSA sample was taken at each station at the request of Southern IFCA to confirm subtidal sediment habitat.

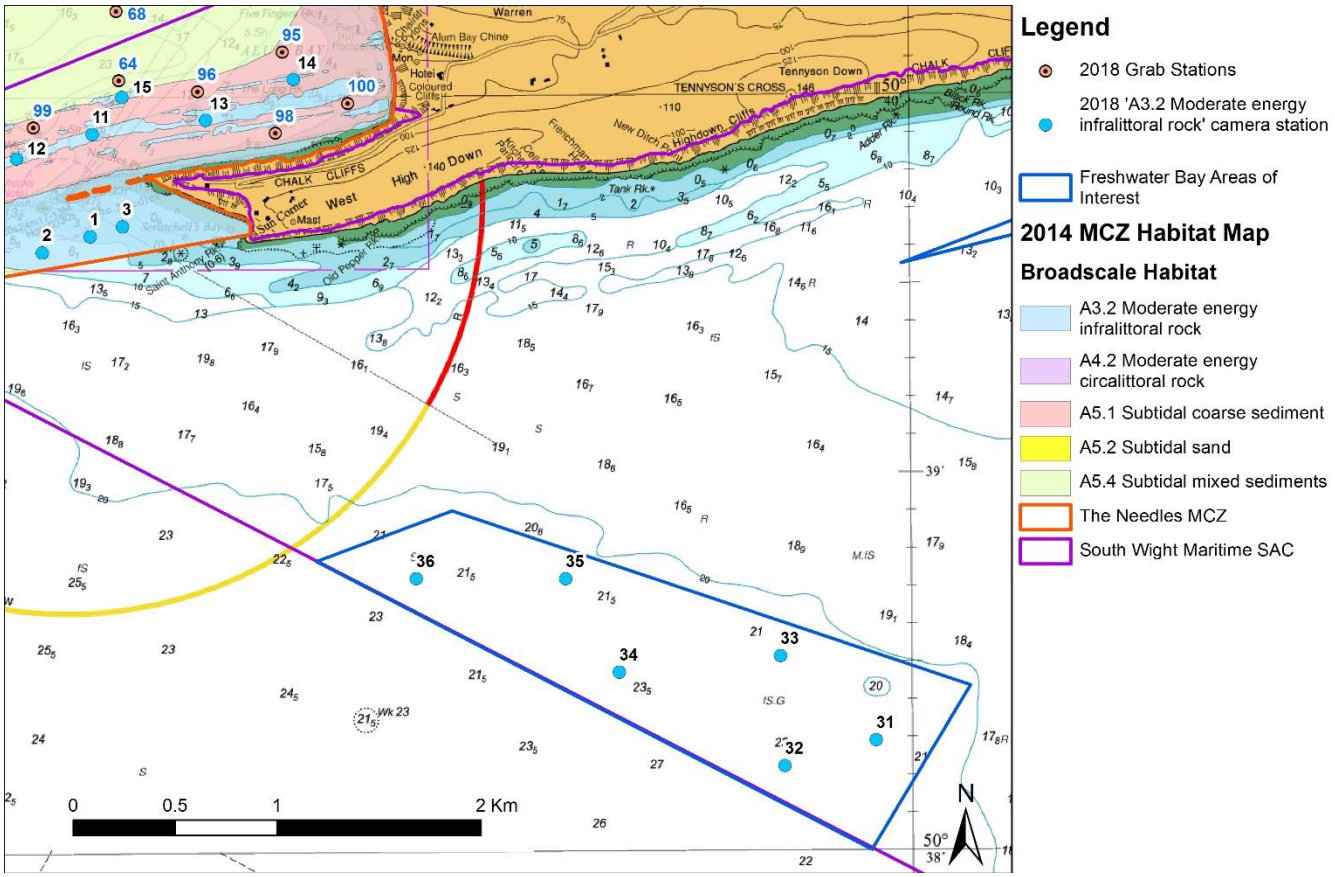


Figure 4. Location of the proposed camera stations in the 'Area of Interest' off Freshwater Bay in South Wight Maritime SAC.

There are two subtidal Seagrass Beds in The Needles MCZ, at Colwell Bay and Totland Bay. A survey of these Habitat FOCI was undertaken in summer 2018 by the Environment Agency on behalf of Natural England. To monitor bed extent and density, a video groundtruthing and echosounder mapping approach was used. This work has been reported separately as it did not form part of the MCZ funded project.

Marine specialists from the Environment Agency and Natural England reviewed the plan. The following hazards were identified from the UKHO Admiralty charts: underwater cables, shallow water depths and underwater obstructions. Sampling stations were relocated to avoid these hazards as far as possible.

A ‘Notification of an exempt activity form’ for ‘samples and investigations’ was submitted to the Marine Management Organisation prior to the survey being carried out.

2.2 Sample Collection Methodology

2.2.1 Habitat Characterisation

Drop video camera equipment (Annex 7.2.2 and 7.2.3) was deployed in accordance with the MESH 'recommended operating guidelines (ROG) for underwater video and photographic imaging techniques' (Coggan et al., 2007). The Subsea Technology & Rentals (STR) SeaSpyder camera system was deployed from the stern of the survey vessel, as shown in Figure 5. Real time navigation data acquisition and manual position fixing when the gear contacted the seabed was captured via Trimble® HYDRO*pro*™ software and logged by the survey officer. The mid-point of the vessel's stern gantry was used as the default offset for position fixing (see Annex 7.2.1 for further details). Video files and digital still images were transmitted via the sea cable to be captured and saved directly to a computer in the survey cabin. The video footage was annotated with time and position using a GPS (SIMRAD MX512 DGPS) referenced video overlay (uncorrected position data). Images of the seabed were captured approximately every 10 to 15 m over a distance of >150 m. Extra photographs were taken in heterogeneous areas of BSH and if particular habitat/species FOCI were observed. If a BSH habitat boundary was detected towards the end of a tow, the camera deployment was extended to confirm the change. The drop frame depth was controlled via a winch operator receiving instructions from the survey cabin. For further deployment details please see the 'EA underwater video procedure_version 2.4' in Annex 7.3.

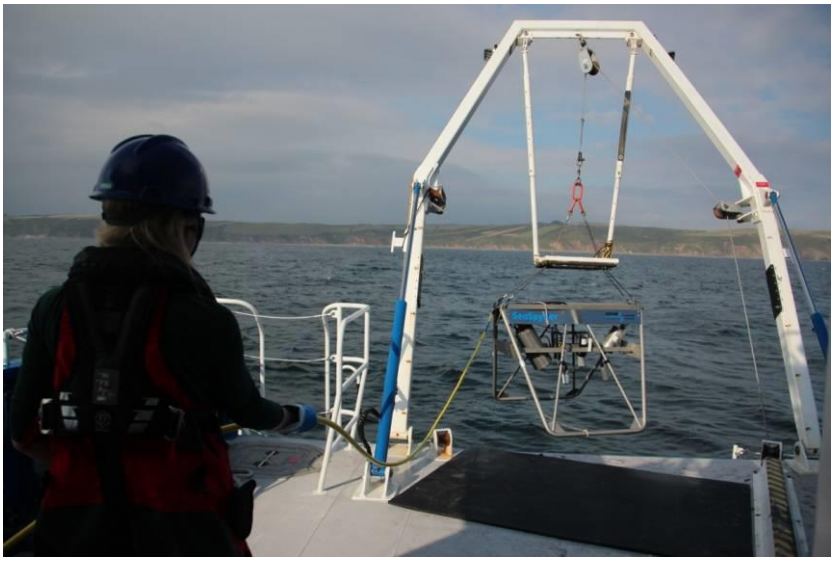


Figure 5. STR SeaSpyder Drop Camera system being deployed from the stern of the coastal survey vessel.

During each Drop Camera deployment, a member of the survey team continuously monitored the real-time video feed, recording general station notes, underwater visibility (Annex 7.4), habitat information and fauna observations. Please see Annex 7.5 for a worked example of the video logsheet.

2.2.2 Broadscale Habitat Groundtruthing

A Mini-Hamon grab (Figure 6), with a sampling area of 0.1 m^2, was deployed from the stern gantry of the vessel to collect sediment from the seabed, as described by Ware and Kenny (2011). Sampling positions were recorded (fixed) using Hydropro data acquisition software when the gear contacted the seabed, with the mid-point of the vessel's stern gantry being used as the default offset for position fixing (see Annex 7.2.1 for further details).

Once recovered, the sample was emptied into a suitable container, photographed, and the sample volume measured. A minimum of three attempts was made at each station to obtain a valid grab sample before the station was abandoned. A sample volume of 5 litres was required to qualify as a valid sample. Samples of <5 litres were ordinarily discarded. However, when it was difficult to obtain a valid sample, a sample with <5 litres of material was retained at the discretion of the lead scientist if it was deemed representative across all attempts made at that station. For valid samples, a small scoop was used to remove a sub-sample (approx. 500 ml) of sediment for particle size analysis (PSA). The remaining sample was washed over a 1 mm sieve to retain the faunal fraction (Figure 6), photographed and preserved with a buffered 4% formaldehyde solution for transfer ashore to a specialist laboratory for analysis.

If the volume of sediment collected was insufficient for faunal analysis in each grab attempt made at a particular station, a photograph was taken and, if possible, material removed for PSA. The station was then abandoned.

At three stations, additional grabs were collected to retrieve material for contaminant analyses using a 0.1 m^2 Day Grab (Figure 7) and following the methodology detailed in the Environment Agency operational instruction 10_01 (Environment Agency, 2007). Surface scrapes (i.e. the recently deposited sediment) were removed from each grab to a maximum depth of 1 cm (avoiding the anoxic layer). A metal scoop was used to collect material for organic contaminant analyses and a plastic scoop for heavy metals. The remaining material was then discarded. The upper 1 cm was used as this provides a record of the most recent contaminant levels deposited in the sediment. All samples were frozen at -20°C after collection.

Figure 6. Mini-Hamon grab (left), and equipment for sieving benthic fauna samples (right)

Figure 7. Day Grab used for collecting contaminants samples

Sediment descriptions were recorded for each sample collected. For consistency across all the MCZ benthic habitat surveys, these were based on a pictorial field guide produced by Cefas marine sedimentologists, a modified Folk seabed sediment classification system (Long, 2006) (Figure 8) and the Wentworth Scale (Table 2).

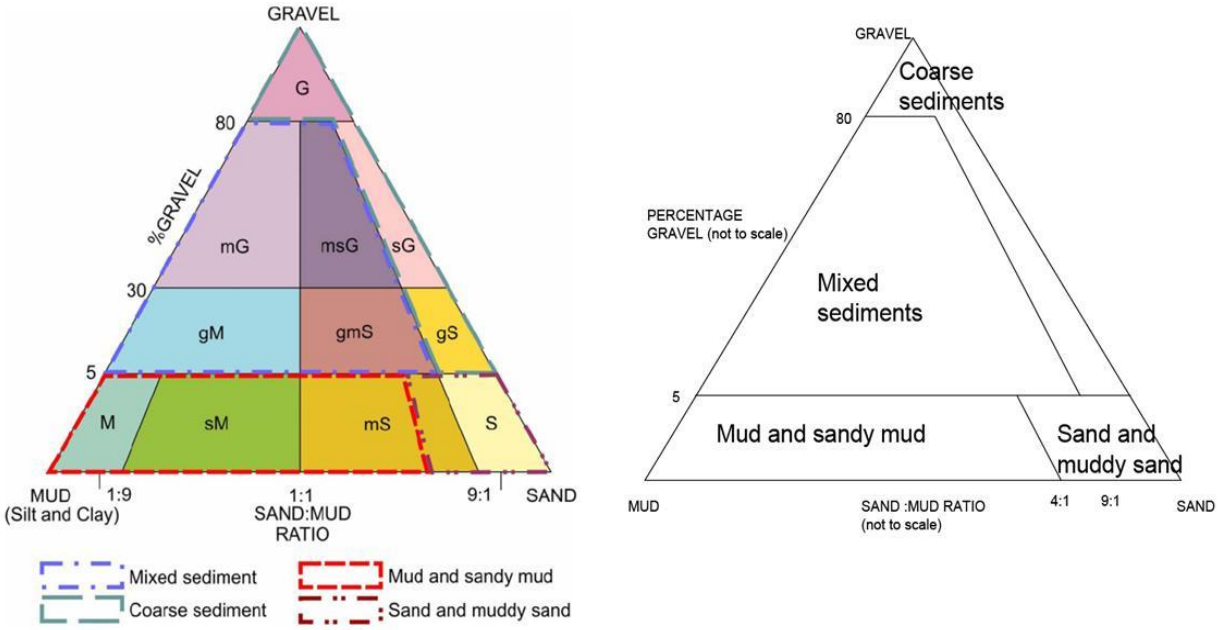


Figure 8. Simplified sediment classification of the Folk triangle for UK SeaMap (Long, 2006).

Table 2. Sediment grade terms and size limits (Wentworth, 1922).

Size	Grade Terms
>256 mm	Boulder
>64-256 mm	Cobble
4-64 mm	Pebble

3. Survey Narrative

Between the 2nd July and 5th November 2018, The Needles MCZ monitoring survey took seven 'on-task' days to complete (Table 3). Daily progress reports are available from the Environment Agency on request.

Table 3. Summary of equipment deployments during the 2018 The Needles Marine Conservation Zone monitoring survey.

Equipment	Dates	Duration
Drop Camera deployments	3rd, 4th July	2 days
Mini-Hamon grab deployments	5th, 6th, 10th, 12th July	4 days
Day Grab deployment	5th November (Contaminants)	1 day

The camera survey was completed within the first two days, and the grab survey was conducted over the following eight days. The six contaminant samples were collected on the 5th November 2018.

Environment Agency survey personnel mobilised to the survey vessel *Solent Guardian* moored in Saxon Wharf Marina, Southampton on the 2nd July 2018. The SeaSpyder camera system was assembled and successfully tested at Saxon Wharf on the 2nd July. A Natural England employee joined the Environment Agency scientific staff on board on the 3rd July, and after a safety induction, the vessel departed Saxon Wharf at 06:45 UTC for The Needles MCZ survey area. The sea state was moderate with a force 4-5 easterly wind and 0.5 m of swell. Drop Camera (DC) deployments commenced at 07:46 UTC. During the day, 26 of the 30 DC stations were attempted. Strong currents (>3 knots) hampered progress at some stations so several attempts were made. Three stations (NDLS04, 18, and 27) were eventually abandoned due to the strong currents. At five stations (NDLS16, 20, 22, 24 and 25) poor visibility was encountered. In addition, fishing gear necessitated that station NDLS04 had to be moved 150 m east from the target co-ordinate. Eight of the target grab stations were also checked with the camera for the presence of Seagrass Beds. Five of these stations were consequently removed from the proposed grab survey as the presence of Seagrass Beds was confirmed. *Solent Guardian* departed the survey area at 14:30 UTC, arriving back at Saxon Wharf at 16:50 UTC.

On the 4th July, *Solent Guardian* departed Saxon Wharf marina at 05:45 UTC and arrived at The Needles MCZ survey area at 07:52 UTC. Weather conditions were favourable with force 3-4 southeasterly winds, smooth sea state and approximately 0.2 m of swell. Having completed a safety briefing during the passage, survey operations commenced as soon as the vessel arrived at the first station at 07:52 UTC. The remaining four stations were visited during the day. The three stations that had

been abandoned on the previous day due to strong currents (NDLS04, 18, and 27) and the five stations where poor visibility was encountered (NDLS16, 20, 22, 24 and 25) were re-surveyed. The six stations located in the Southern IFCA area of interest (Freshwater Bay), outside the MCZ were also surveyed. Subtidal sediment was observed at these six stations and therefore would be sampled for PSA during the grab survey. The vessel departed the survey area at 13:37 UTC and arrived back at Saxon Wharf at 15:10 UTC. Upon arriving at the marina, the DC system was disassembled and the Mini-Hamon Grab equipment loaded on to the vessel in preparation for grab operations the following day.

At 05:30 UTC on the 5th July, it was observed that the rubber seal on the Mini-Hamon Grab should be replaced. This task was completed and *Solent Guardian* left Saxon Wharf at 06:10 UTC, arriving on station at 08:46 UTC. Twenty Mini-Hamon Grab stations were completed during the day. Viable samples for infauna and PSA were collected at four stations; five stations for PSA only, and five stations were discarded due to an insufficient quantity of sediment. All six stations in Freshwater Bay were successfully sampled for PSA only, as requested by Southern IFCA. *Solent Guardian* departed the survey area at 14:05 UTC and arrived back in Saxon Wharf at 16:25 UTC.

With continuing good weather, *Solent Guardian* departed Saxon Wharf at 06:00 UTC on the 6th July and arrived on station at 08:12 UTC. An additional safety brief was held during the transit to site due to a change in survey personnel. During the day 19 stations were sampled for PSA and infauna, four stations for PSA only, and two stations discarded due to insufficient sediment. The vessel departed the survey area at 14:30 UTC and arrived back in the marina at 15:45 UTC.

On Sunday 8th July, *Solent Guardian* departed Saxon Wharf at 05:30 UTC and arrived in The Needles MCZ at 07:30 UTC. At this time, a capacitor failed in the vessel deck hose system which meant no sample processing was possible, and the team was forced to return to the marina for repair work to be completed.

The morning of the 9th July was spent alongside in Saxon Wharf while the deck hose capacitor was replaced. Simultaneously, infauna samples on board the vessel were moved ashore to a storage area. In the afternoon, to make best use of vessel time, a statutory water quality survey was completed.

After being postponed for two days, The Needles MCZ survey re-commenced on July 10th. The vessel left Saxon Wharf at 05:30 UTC and arrived at the survey area at 07:50 UTC. The weather was force 3-4 variable winds and slight sea state. During the day ten stations were sampled for PSA and infauna, six stations for PSA only, with seven stations discarded due to insufficient sediment. The vessel departed the survey area at 14:30 UTC and arrived back alongside at 15:45 UTC.

On the 11th July, a scheduled vessel crew change to comply with the maritime working time rules meant that the vessel did not leave Saxon Wharf. During this mobilisation day, survey progress was assessed and a list of additional stations was produced to ensure that the required number of 'A5.4 Subtidal mixed sediments' samples were collected. It was decided that 25 extra stations would be added to the survey plan.

On the 12th July, *Solent Guardian* left Saxon Wharf at 05:30 UTC, a safety brief was carried out during the transit and the vessel arrived at the survey area at 07:55 UTC. The wind was force 3 variable throughout the day, with smooth sea state and less than 0.5 m of swell. During the day, 24 of the 25 newly added stations were sampled with 12 stations sampled for PSA and infauna, eight stations for PSA only, and four stations discarded due to insufficient sediment. One station was left due to time constraints. The vessel departed the survey area at 14:30 UTC and arrived back in the marina at 15:56 UTC. This marked the end of the Mini-Hamon Grab component of The Needles 2018 MCZ survey. Due to other vessel commitments, sampling of the six contaminants stations using a Day Grab (DG) was postponed until later in the season.

The contaminant stations were sampled on the 5th November 2018. *Solent Guardian* left Saxon Wharf at 07:20 UTC and arrived at the first contaminant station at 09:24 UTC. The weather was favourable with a force 3-4 southeasterly wind, 0.5 m swell and moderate to good visibility. During the day, three stations were successfully sampled for contaminants (NDLS37C, 43C and 38C). A further 11 stations were attempted (NDLS51, 76, 54, 49, 61, 93, 102, and 44) but were all discarded due to unsuitable or insufficient sediment. Station NDLS95 was abandoned as it was surrounded by fishing gear. Station NDLS86 was abandoned due to strong currents. Station NDLS92 was abandoned due to a large piece of wire rope being caught in the grab jaws. *Solent Guardian* departed the survey area at 14:16 UTC and arrived back to Saxon Wharf at 16:25 UTC having attempted all target stations.

4. Data Acquisition

4.1 Survey plan changes

The first day of grab surveying yielded very few valid samples in the ‘A5.4 Subtidal mixed sediments’ target feature. To ensure an adequate amount of samples was obtained to meet Objective 1, an additional 25 grab stations (NLDS102-126) (Figure 9) were added to the survey plan within the mapped ‘A5.4 Subtidal mixed sediments feature’.

Eight grab stations in the vicinity of mapped subtidal Seagrass Beds were assessed with the camera for Seagrass Bed presence to determine if grabbing could be undertaken. Subtidal Seagrass Beds were observed at five grab stations (NDLS19, 26, 39, 40 and 41) so grabbing was aborted at these stations (Figure 12).

In the Freshwater Bay Area of Interest, within the South Wight Maritime SAC, all six stations were identified as subtidal sediment from the camera survey. Therefore these six stations were sampled for PSA using the Mini-Hamon Grab (Figure 11) to address Objective 3.

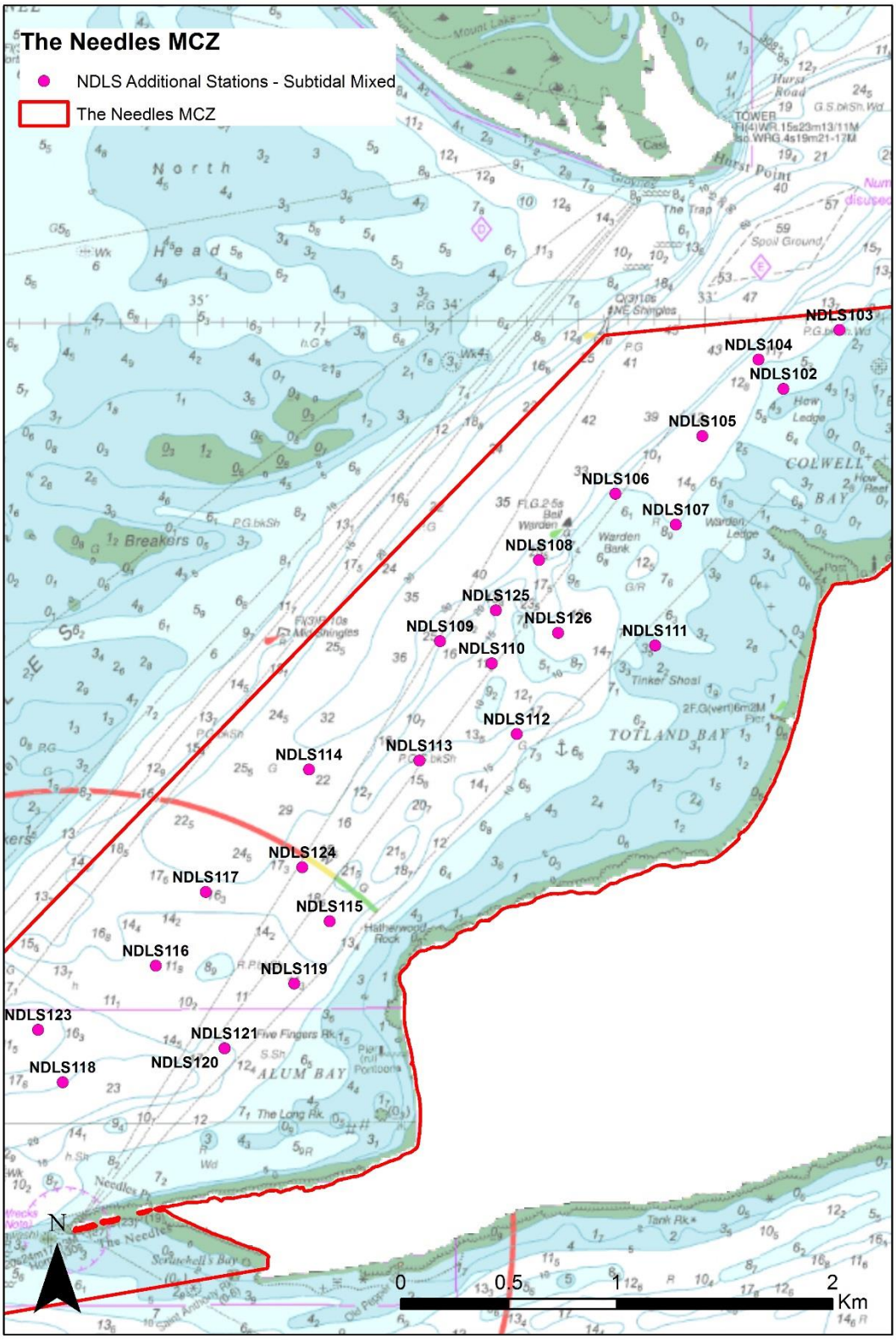


Figure 9. Location of additional Mini-Hamon Grab stations targeting 'A5.4 Subtidal Mixed Sediments' during The Needles Marine Conservation Zone 2018 survey.

4.2 Sample collection summary

Samples collected during the 2018 The Needles MCZ survey are summarised in Table 4.

Table 4. Summary of samples collected during the 2018 The Needles Marine Conservation Zone survey.

Equipment	Data Type	No. of samples
Drop Camera	Video and still images	55 videos, 506 images
Mini-Hamon grab	Biota and PSA	45
	PSA only	29
Day Grab	PSA and Contaminants	3

To address Objective 1 viable grab samples were collected to survey designated subtidal sediment features. Samples for both infaunal and particle size analyses were collected at 45 stations, using the Mini-Hamon grab (Figure 10 and 11). At 23 stations, the quantity of sediment collected was only sufficient for particle size analysis. Eighteen stations (NDLS55, 57, 59, 64, 67, 73, 77, 80, 89, 90, 94, 96, 97, 99, 106, 107, 116 and 117) selected for groundtruthing yielded only discards. Definitive classification of habitat features present was not possible prior to the results of the more detailed sample analyses carried out in the laboratory being available.

To address Objective 2, video footage and digital photographs of the seabed were captured to survey the designated subtidal rock features and Subtidal Chalk Habitat FOCI at 30 stations within The Needles MCZ boundary (Figure 10). European Nature Information System (EUNIS) Level 3 BSH classifications and species identifications will be assigned to each station following detailed independent analysis of the usable video footage and stills.

To address Objective 3, video footage, digital photographs of the seabed and PSA samples were collected at six stations in the Freshwater Bay SAC to improve confidence in the existing feature data for Annex I Reef.

Additionally, samples were collected at three stations (NDLS37, 38 and 43) for both particle size and sediment contaminant analyses (heavy metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, tributyltin) inside the MCZ boundary.

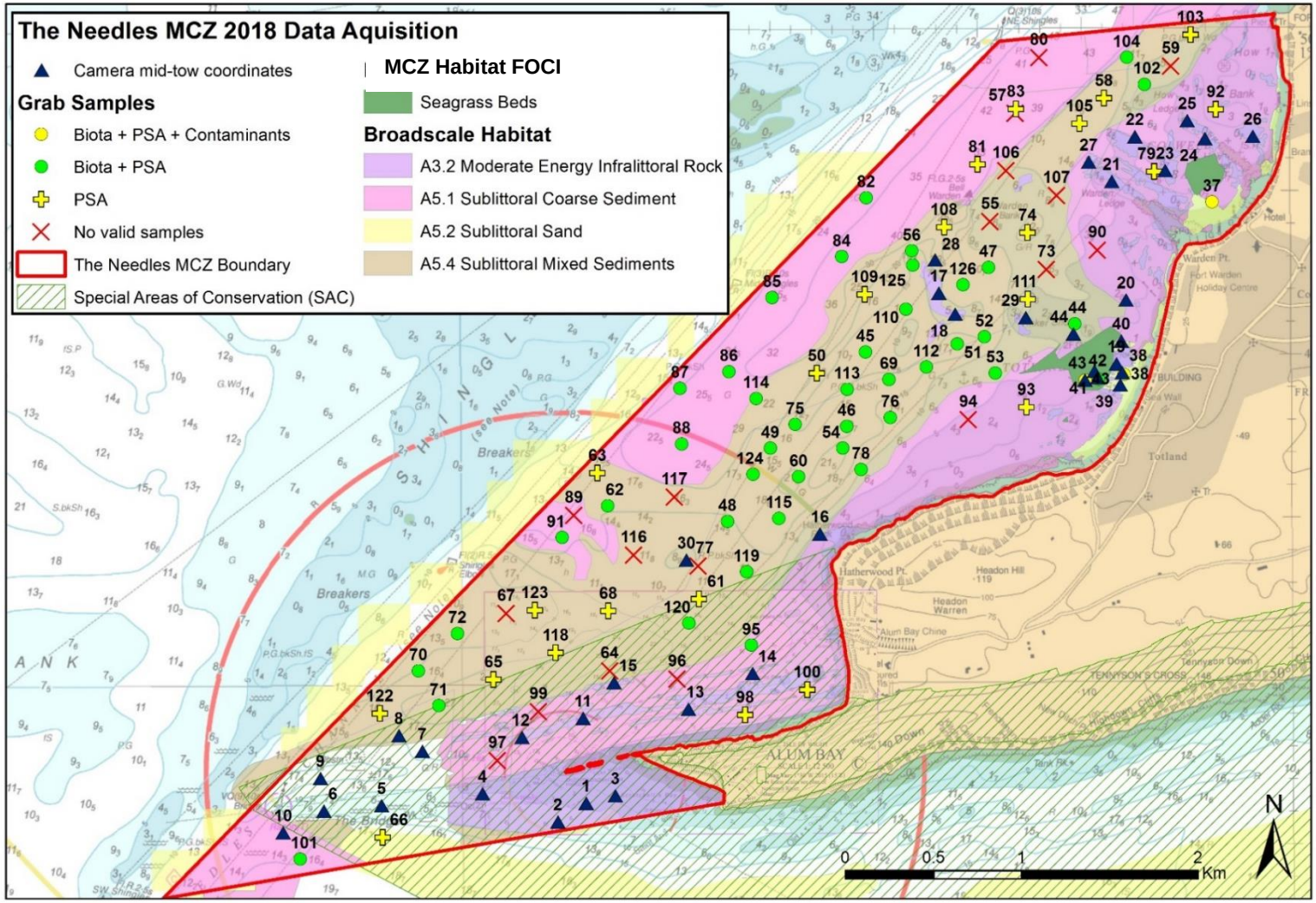


Figure 10. Drop Camera tow and Mini-Hamon Grab samples acquired during The Needles Marine Conservation Zone Summer 2018 survey, mapped over Seagrass Bed Habitat FOCI and 2014 interpreted Broadscale Habitat data (Mylroie et al., 2015).

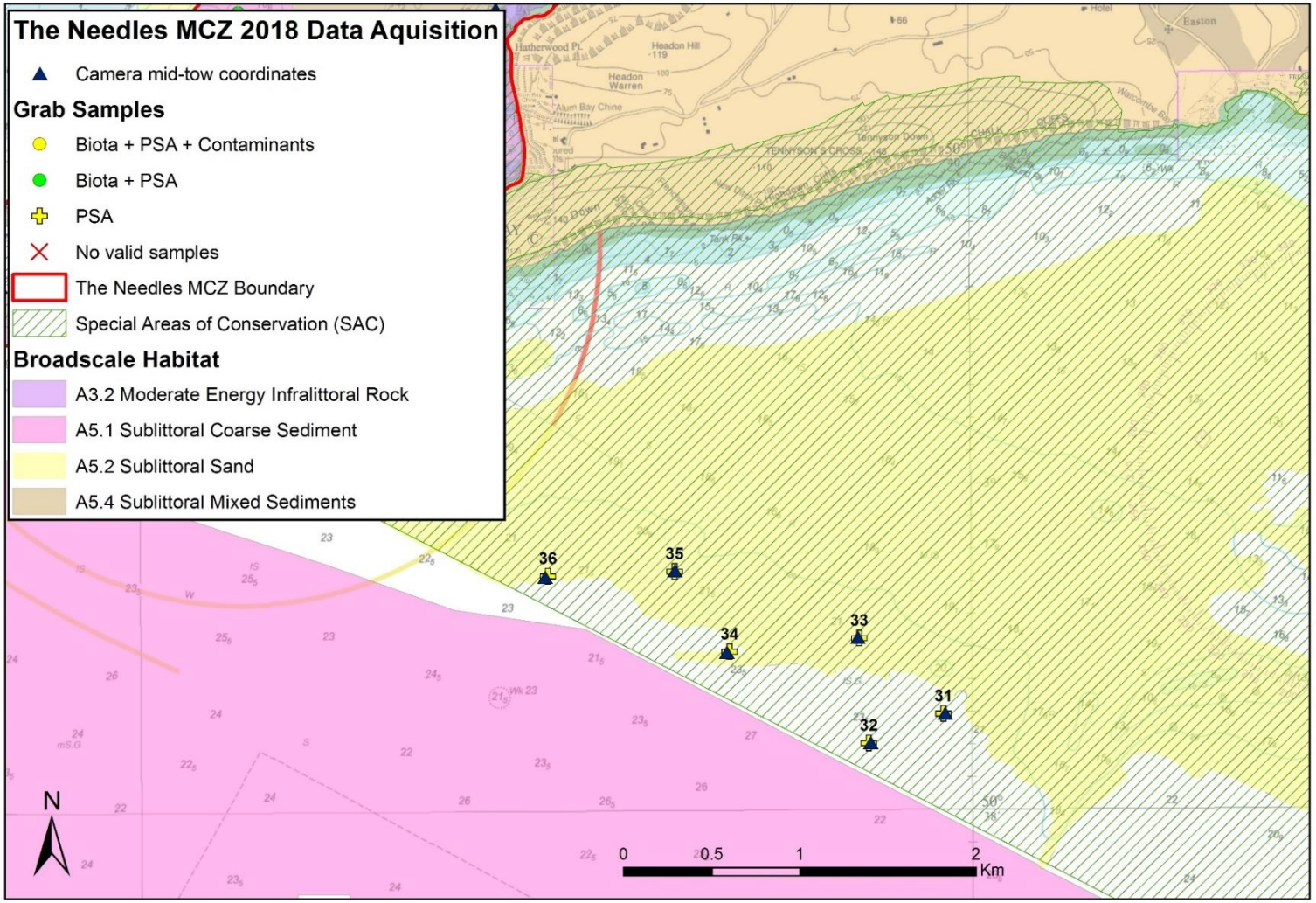


Figure 11. Drop Camera tow and Mini-Hamon Grab samples acquired for the Southern IFCA during The Needles Marine Conservation Zone Summer 2018 survey, mapped over 2014 interpreted Broadscale Habitat data (Mylroie et al., 2015).

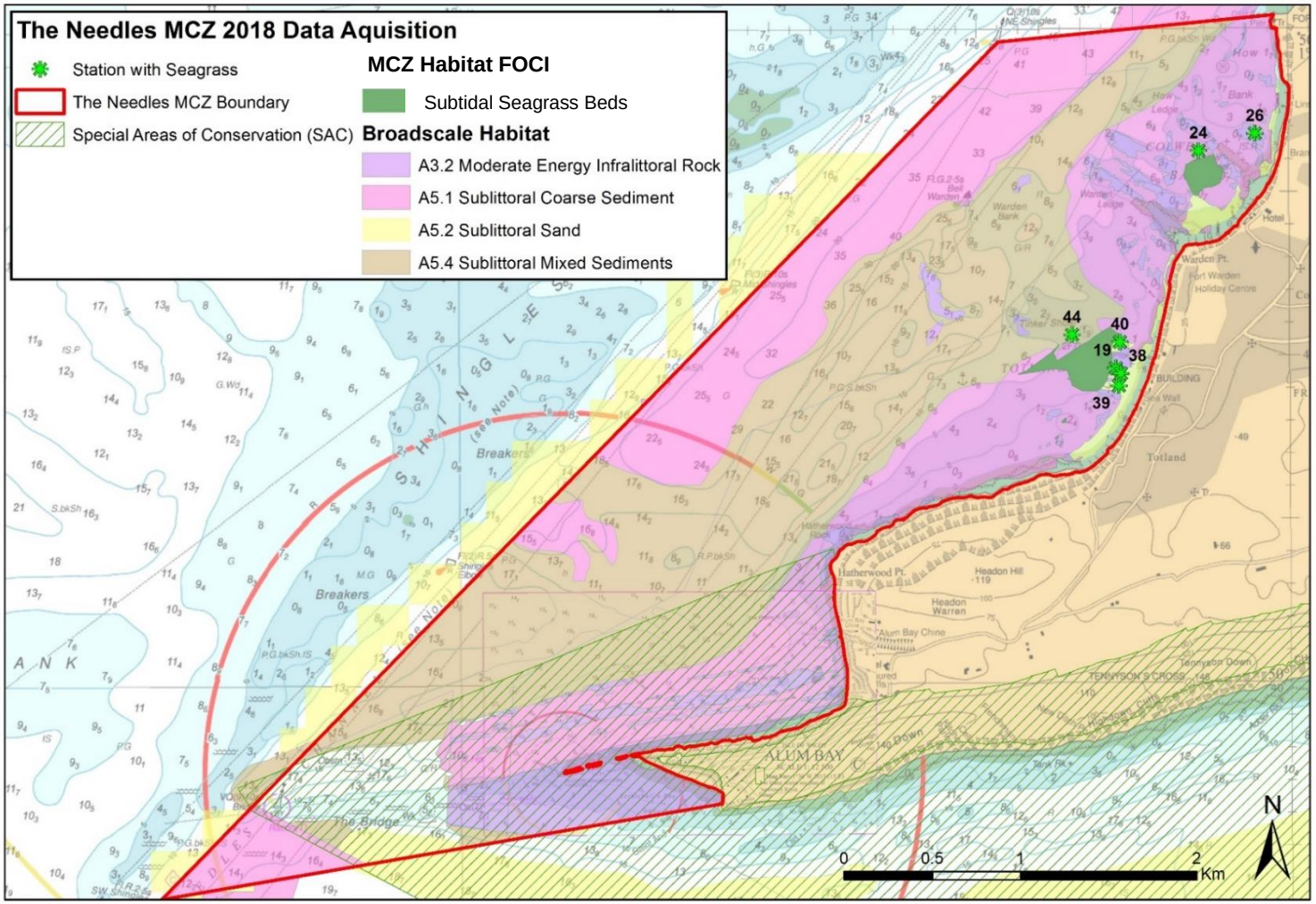


Figure 12. Seagrass Bed observations during The Needles Marine Conservation Zone Summer 2018 monitoring survey, mapped over Seagrass Bed Habitat FOCI and 2014 interpreted Broadscale Habitat data (Mylroie et al., 2015)

4.2 Evidence of anthropogenic impacts

Throughout The Needles MCZ 2018 survey, evidence of anthropogenic activity was observed on the live video feed at numerous stations. Stations were moved accordingly, Table 5 highlights this information.

Table 5. The Needles Marine Conservation Zone Summer 2018 sampling stations impacted by anthropogenic activities (Mini-Hamon Grab, DC = Drop Camera, DG – Day Grab).

Date	Survey Equipment	Station Number	Distance relocated (m)	Reason
03/07/2018	DC	004	100	Fishing pots in area
04/07/2018	DC	004	100	Fishing pots in area
10/07/2018	Mini-Hamon Grab	053	20	Fishing gear
10/07//2018	Mini-Hamon Grab	094	90	Fishing gear
10/07/2018	Mini-Hamon Grab	038	n/a	Boat mooring
10/07/2018	Mini-Hamon Grab	044	40	Fishing floats
12/07/2018	Mini-Hamon Grab	111	n/a	Fishing gear
05/11/2018	DG	095C	n/a	Station not attempted due to fishing gear
05/11/2018	DG	092C	n/a	Metal cable caught in grab, station abandoned

5. References

Arnold, K, Godsell, N. and Stevens, E. (2014). The Needles rMCZ Survey Report. Environment Agency: Peterborough, UK.

Coggan, R., Mitchell, A., White, J. and Golding, N. (2007). Recommended Operating Guidelines (ROG) for Underwater Video and Photographic Imaging Techniques. Mapping European Seabed Habitats (MESH) Video Working Group Report v.11.2. Available online: http://www.emodnet-seabedhabitats.eu/PDF/GMHM3_Video_ROG.pdf [Accessed 20/07/2018].

Defra. (2016). The Needles Marine Conservation Zone. Factsheet. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/492458/mcz-the-needles-factsheet.pdf [Accessed 13/11/2018].

Environment Agency. (2007). Sediment sampling in water for chemical and particle size analyses. Operational Instruction 10_01 (internal document). Environment Agency, Bristol, UK.

Long, D. (2006). BGS detailed explanation of seabed sediment modified folk classification. Mapping European Seabed Habitats (MESH) project document. Available from: https://www.researchgate.net/publication/284511408_BGS_detailed_explanation_of_seabed_sediment_modified_folk_classification [Accessed 21/08/2018].

Mylroie, P., Evans, J. and Colenutt, A. (2015). The Needles rMCZ Post-survey Site Report. Marine Protected Areas Data and Evidence Co-ordination Programme (MB0120) Report 35. Defra: London, UK.

Ware, S.J. and Kenny, A.J. (2011). Guidelines for the Conduct of Benthic Studies at Marine Aggregate Extraction Sites (2nd Edition). Marine Aggregate Levy Sustainability Fund, 80 pp.

Wentworth, C.K. (1922). A scale of grade and class terms for clastic sediments. The Journal of Geology 30, 377-392.

6. General List of Abbreviations

BSH	Broadscale Habitat
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CHP	Civil Hydrography Programme
CS	Camera Sledge
CSV	Coastal Survey Vessel
DC	Drop Video Camera
Defra	Department for Environment, Food and Rural Affairs
DG	Day Grab
EA	Environment Agency
ECMAS	Estuarine and Coastal Monitoring & Assessment Service
ENG	Ecological Network Guidance
EUNIS	European Nature Information System
FOCI	Features Of Conservation Importance
IFCA	Inshore Fisheries and Conservation Authority
MCZ	Marine Conservation Zone
MESH	Mapping European Seabed Habitats
PSA	Particle Size Analysis
REC	Regional Environmental Characterisation
RSG	Regional Stakeholder Group
SAC	Special Area of Conservation
SAD	Site Assessment Document
SNCB	Statutory Nature Conservation Body
SOP	Standard Operating Procedure
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
STR	Subsea Technology and Rentals
UTC	Csideordinated Universal Time

7. Annexes

7.1 Coastal Survey Vessel General Information

Briggs Marine and Environmental Services Ltd.
Seaforth House, Seaforth Place, Burtisland, Fife, KY3 9AX.
Tel: +44(0)1592 872939
Email: marketing@briggsmarine.com
Website: www.briggsmarine.com

Solent Guardian

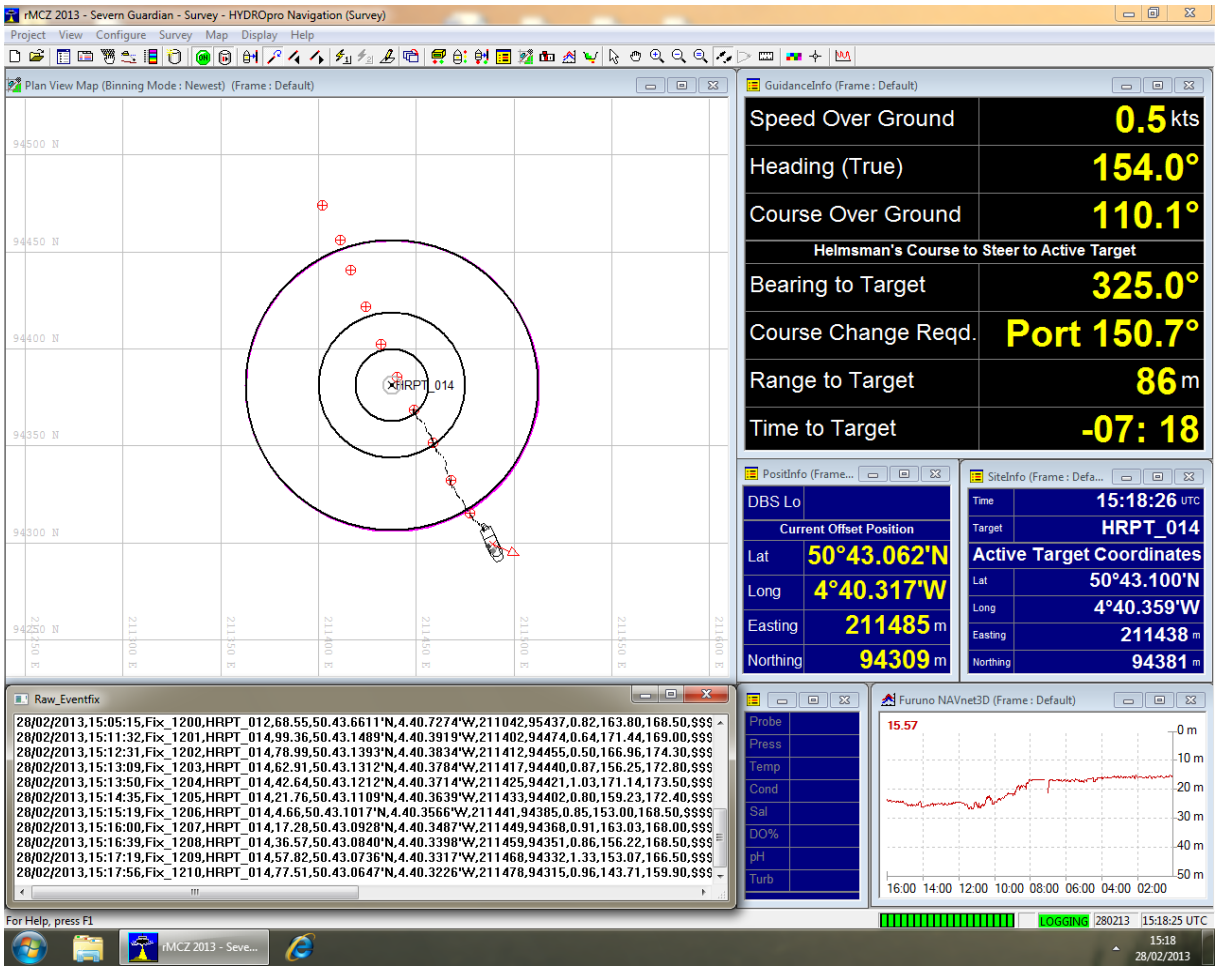
General Information
Length: 18.3 m
Beam: 6.3 m
Draft (baseline): 1.15 m
Draught (skegs): 2.2 m
Displacement (light ship): 22 T
Displacement (full load): 30 T
Service Speed: 16 knots
Maximum Speed: 18 knots

Main Equipment
Main Engines: 2 x Volvo D9-MH 261 bkW @ 2200 rpm. Twin Disc MGX-5075 integral vee-drive
Crew: 7
Scientific Officers: Up to 10
Accommodation: 3 x twin cabins and mess
Data network to share information around vessel
Wet lab/bench for processing water, sediment and ecology samples
Fridge/freezer for sample storage
Dry lab space for two computers and data processing
Large aft deck working area
A frame – 2 T SWL
Double Independent Drum Trawl Winch – 2 T SWL
Hydraulic crane

7.2 Survey Equipment

7.2.1 Navigation and Positioning

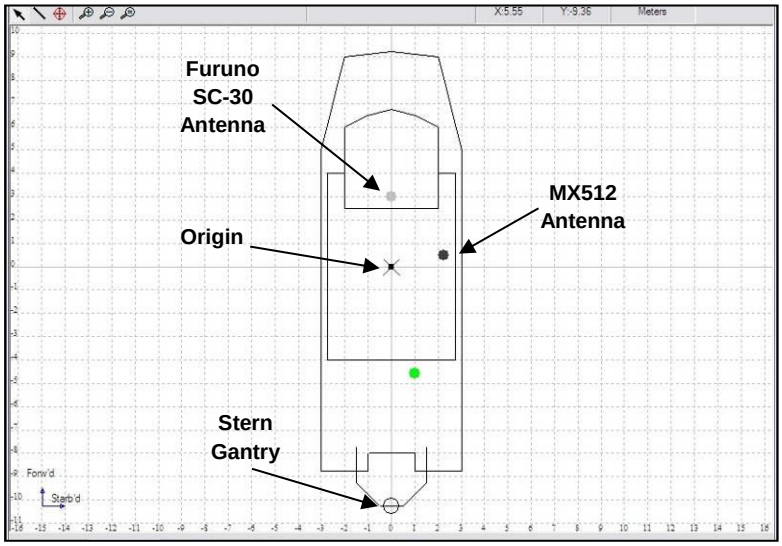
Trimble® HYDRO*pro*™ software is utilised for real-time navigation and survey data acquisition.



Trimble® HYDRO*pro*™ software screen grab displaying real-time navigation and survey data acquisition for a MCZ Drop Camera survey line.

Navigational and survey equipment offsets on the coastal survey vessel *Solent Guardian* (Environment Agency Estuarine and Coastal Monitoring & Assessment Service).

NMEA Device	Make/Model	Offset Name	Offset (m) X (Starb'd)	Y (Forw'd)	Z +ve (Up)
Gyrocompass	Simrad Robertson RGC50	n/a	-	-	-
Navigation Echosounder	Furuno DFF1, 525ST-MSD transducer	n/a	-	-	-
Survey Echosounder	Kongsberg EA400	n/a	-	-	-
Origin	n/a	Origin	0.0	0.0	0.0
Navigation GPS (Secondary)	Furuno SC-30 DGPS	Furuno SC-30 Antenna	0.0	3.0	0.0
Survey GPS (Primary)	SIMRAD MX512 DGPS	MX512 Antenna	2.25	0.5	0.0
n/a	n/a	Sediment Grab (Stern Gantry)	0.0	-10.25	0.0



Trimble® HYDROpro™ vessel editor screen showing survey equipment offsets from the origin (Environment Agency Estuarine and Coastal Monitoring & Assessment Service).

7.2.2 SeaSpyder Drop Camera System

STR
SUBSEA TECHNOLOGY & RENTALS

SEASPYDER DROP CAMERA SYSTEM


Surface Control Unit & Processor

The SeaSpyder Underwater Drop Camera System is part of a family of field proven camera systems manufactured by STR for the marine survey and environmental communities. The SeaSpyder is ideally suited for operation in shallow-medium water depths with the standard system having a working depth range of 500m. For applications demanding a deeper rating, a "telemetry" model is offered which operates over longer cable lengths for operation down to 1000m. Both models are fitted with a new generation digital SLR Camera offering high resolution digital stills and HD Video for the highest imagery detail. The high specification digital SLR Camera offers an impressive 18.0 mega pixels resolution and both manual and automatic focus for achieving the sharpest images. The captured digital stills are framed with the aid of dedicated real-time video and can be transferred to the topside 'on the fly' for rapid online review.

A 19" rack mount Surface Control Unit and powerful topside processor give full remote control of the camera via the easy to use SeaView GUI software. As standard, the purpose designed camera deployment frame is fitted with a subsea electronics and camera housing, high power underwater flash, an array of four high intensity LED lamps and dual scaling laser pointers to provide accurate imagery scaling. There is the option to install additional sensors with the availability of three user defined serial interfaces with optional power.

SYSTEM FEATURES

- Latest generation 18 Mega Pixels Digital SLR Camera
- Full remote control of camera functions including automatic and manual focus control
- 'On-the-fly' image download
- Real time HD Video
- High intensity LED Lamps
- Dual lasers for precise imagery scaling
- High speed digital telemetry link to camera and sensors
- Additional user defined RS232 ports and 24VDC power interfaces

SEASPYDER SHALLOW WATER CAMERA SYSTEM

SEASPYDER RACK MOUNT PROCESSOR

Hardware: Standard 19" Rack Mountable
Processor: Intel I5 3.1GHz Quad-Core
Memory: 4GB DDR3 RAM
Storage: 500GB hard drive
Interface: DVD-RW, 2 x 1 GigE, 6 x USB, 4 x RS232
Display: 2 x 22" LED HDMI Monitor
Power: 110/240 VAC, 50 Hz (900W)
Dimensions: 19" 3U rack mountable 550 mm (L) x 485 mm (W) x 132mm (H)

SEASPYDER SEAVIEW SOFTWARE

Key Features:

- Remote control of SeaSpyder Digital Stills Camera
- Digital stills and video capture
- "On-the-fly" image download
- External overlay functions
- Realtime composite video
- HD video capture
- Remote control of lights, scaling lasers and additional sensors

SEASPYDER SURFACE CONTROL UNIT

ELECTRICAL

Power Input: 85 – 264 VAC (47 – 63 Hz) ≈ 500 W max
Cable Power: +/- 48VDC Nominal (≈ 400W max.) with built in electrical leakage detector

SIGNAL INTERFACE

Cable Interface #1: High bandwidth VDSL2
Cable Interface #2: Differential Colour Composite Video with automatic cable length compensation

MECHANICAL

Dimensions: 19" 2U rack mountable 550 mm (L) 485 mm (W), 88 mm (H)

SEASPYDER SUBSEA ELECTRONICS

ELECTRICAL

Power Output: 24VDC Output (200 W Max Subsea Power)
Interface: 1 x SeaSpyder Camera & Underwater Flash
4 x 24VDC LED Lamps
2 x RS232 Ports with 24VDC
1 x RS232 Port with 12 VDC/ 24VDC
1 x Dual Scaling Lasers

MECHANICAL

Diameter: 200mm
Length: 409mm
Standard Housing: Hard Anodised Aluminium
Depth Rating: 500m

SEASPYDER 18 MEGA PIXELS UNDERWATER DIGITAL STILLS CAMERA

ELECTRICAL

Image Size: JPEG (720 x 480) to (5184 x 3456)
Image Size: RAW (5184 x 3456)
Video: Full HD (1920 x 1080)
ISO Sensitivity: Auto (100 – 6400), 100 – 12800
Sensor Type: 22.3 x 14.9mm CMOS
Aspect Ratio: 3:2
Shutter Speed: 30 – 1/4000 Sec
Interface: Ethernet

OPTICAL

Standard Lens: 10 – 24mm
Macro Mode: F/3.5 – 4.5
Zoom: Fixed
Focus: Manual & Automatic mode
Angle of View: ≈65° in water
Vertical View: ≈1m²@ 80cm in water

SEASPYDER COLOUR VIDEO CAMERA

ELECTRICAL

Image Resolution: 600 TV lines
Video Format: PAL Composite Colour Video
Sensitivity: 0.01 Lux
Sensor Type: 1/3 Sony Super HAD CCD
Frame Rate: 50 FPS
Video Output: ≈1.3Vpp into 75Ω

OPTICAL

Lens Type: 3.6 mm Wide Angle

SEASPYDER HIGH POWER CAMERA FLASH

ELECTRICAL

Control: TTL control via digital stills camera
Power Input: Power supply via stills camera

MECHANICAL

Diameter: 150mm
Length: 230mm
Weight in Air: 7.6kg
Weight in Water: 3.54kg
Standard Housing: Hard Anodised Aluminium
Depth Rating: 3000 m

SEASPYDER 20W LED LIGHT

ELECTRICAL

Lighting: LED Lamp
Luminous Flux: 1500Lm
Wavelength: Neutral White
Power Input: 24 VDC @ 1.1 A (Built in thermal protection)

MECHANICAL

Diameter: 70mm
Length: 110mm
Weight in Air: 1kg
Weight in Water: 0.58kg
Standard Housing: Hard Anodised Aluminium
Depth Rating: 3000m

SEASPYDER DUAL SCALING SUBSEA LASERS

ELECTRICAL

Power Input: 8 V – 30VDC; 60 m A @ 24VDC

LASER

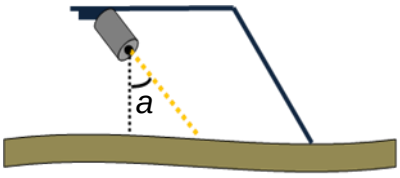
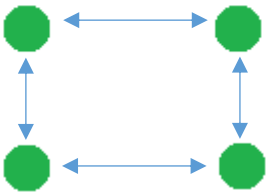
Type: 2 X Class II Safety Classification (<1 milliwatt output)
Beam Shape: Elliptical (Approx 6 mm Red Dot output)
Beam Divergence: - 0.75mrad
Wavelength: 650nm
Temperature Range: -10°C to 40°C

SEASPYDER DROP CAMERA FRAME

MECHANICAL

Length: 2.21m
Width: 1.43m
Height: 1.40m
Weight in Air: 125kg (Inc sensors)

7.2.3 Camera Setup

Survey	
Scientists on board	**Tom Holland, Clare Miller**
Date	**02 July 2018**
Manufacturer and Model	**STR Sea Spyder**
Survey Vessel	***Solent Guardian***
Separate video/stills camera	
Approximate video/stills camera line of sight angle (*a*) 	**45 º**
Distance of video/stills camera above seabed	**60 cm**
Flash unit angle relative to the seabed (approx.)	**45 º**
Number of lights (dimmable?)	**4 - No**
Distance between horizontal and vertical vertices of FOV scaling laser points 	**O 19cm O** **22.5cm 19cm** **O 20cm O**
Comments	

Camera settings	
Date and Time	02 July 2018 18:52
Image quality	Large Normal
Flash setup	Auto
Shutter speed	1/80
Aperture size	F7.1
ISO setting	AUTO
White balance	AWB
Light metering mode	
Focus	Auto

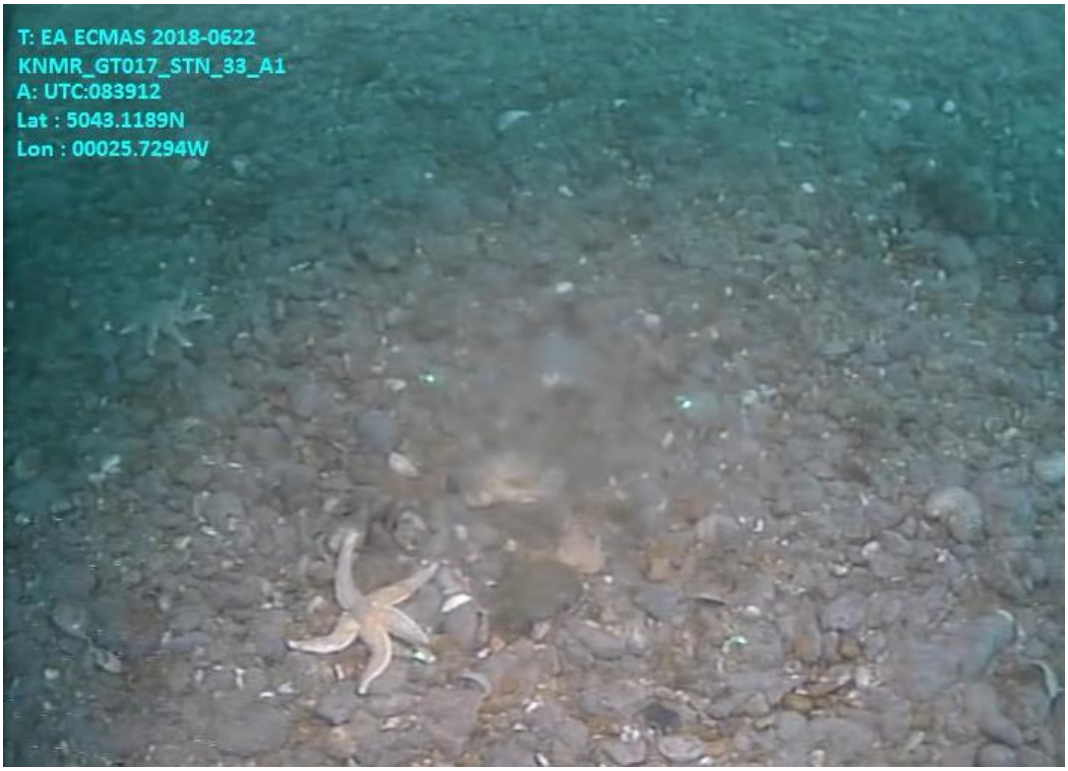
7.3 EA underwater video procedure_version 2.5 (STR Systems)

The procedure outlined below has developed through a series of discussions involving the Environment Agency, Cefas and Natural England. Due to the heterogeneous nature of the inshore coastal seabed habitat, strong tidal streams, various underwater hazards and no dynamic positioning system, a flexible approach is recommended for the underwater video camera deployment. The procedure must be used in accordance with the MESH 'recommended operating guidelines (ROG) for underwater video and photographic imaging techniques' (Coggan et al., 2007).

Important points to remember:

- Select stern gantry offset in Hydropro
- Synchronise all survey equipment (camera, laptops, etc.) with primary survey GPS time (UTC).
- Ensure the correct date, station code, STN number, time and position are displayed on the video overlay and clapperboard (if used).

Overlay Example:
EA ECMAS_2018-0622
KNMR_GT017_STN_33_A1 (annotate if station has been attempted on a previous occasion)
UTC: 083912 (real time feed from survey GPS)
Lat: 5043.1189N (real time feed from survey GPS – **uncorrected**)
Lon: 00025.7294W (real time feed from survey GPS – **uncorrected**)



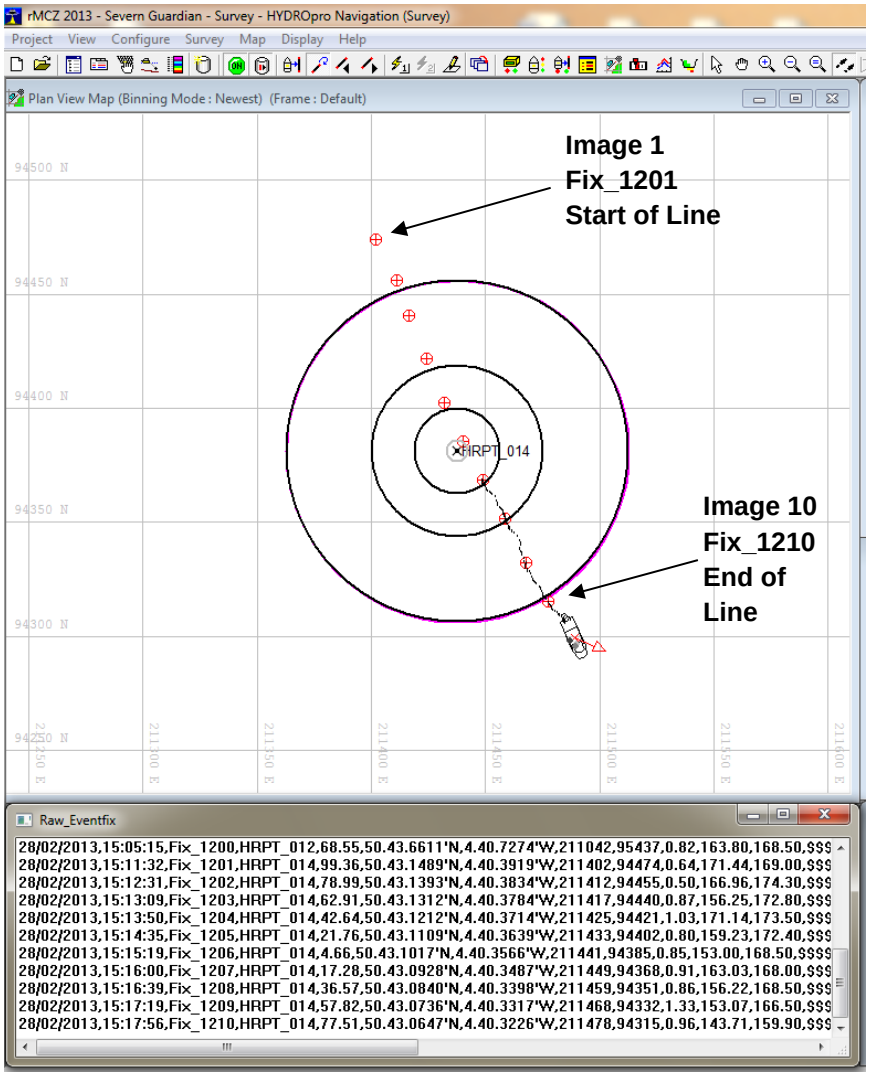
Clapperboard Example:

- Alter the stills prefix to the correct station code.

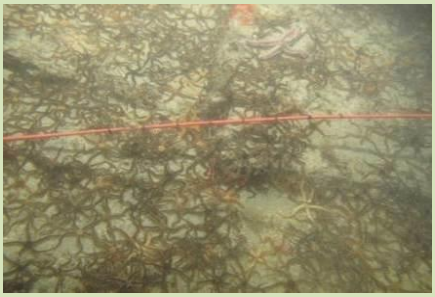
- The field of view scale bar/laser points should be set up/calibrated prior to the survey commencing. Laser pointers are ineffective in moderate/poor visibility conditions; a rope with a visible scale will be required as a replacement
- Set the image resolution to Large Normal (14.7 Megapixels, 18 sec upload time)
- Check the camera settings are appropriate for the conditions; the LED lights are on if required and ensure the video is recording throughout the deployment.

- If a Broadscale Habitat (BSH) boundary is detected extend the deployment to gather as much information on habitat extent as possible.
- Take extra stills if habitat/species FOCI are observed – note these in the survey log.
- If possible, work a downhill seabed profile to avoid slack cable during deployment.
- Beware of sudden depth changes when surveying rocky areas.
- Abandon the station if survey conditions are hazardous.

Video Camera Type	Survey Conditions	Deployment
Drop Camera	Good visibility SOG <1.5 knots	*Deploy camera initially working across the Hydropro 75 m radius target area, as shown in the diagram below. Hover/rest camera above/on the seabed; take a still every 15 m. If tide/wind conditions do not allow a survey line to be followed across the bull ring, use the outer circle as a guide to ensure a distance of 150 m is covered (minimum) nearby.
	Poor visibility SOG >1.5 knots	Hover/rest camera above/on the seabed, take a still every 15 m. If the visibility is very poor, retrieve the equipment after taking 3-4 stills.



7.4 Underwater Visibility Scale

Example image	Scale	Definition
	Excellent	clear, sharp images - no suspended particulate matter
	Good	seabed features and epifauna clearly discernible
	Moderate	seabed features discernible - epifauna difficult to discern
	Poor	both seabed features and epifauna difficult to discern, low confidence in preliminary habitat assessment
	Very Poor	no seabed features or epifauna visible

7.5 MCZ Video logsheet

MCZ Video Logsheet (v1)

Station data

Contract Code: C5433 Vessel: Solent Guardian Date: 09/04/2016

MCZ Name: Mounts Bay Station Code: MNTB071

Nav-Log filename: SW 2016-0409 SL_log Sampling Gear: DC Water Depth: 10·5 m

Cable Out: _____ (metres). Speed Over Ground (SOG): 1·0 (knots)

Notes on Station:
(including any times & adjustments to Cable Out)

Position Reference Point: Stern gantry

Sample data

Digital Video Tape label: n/a

Filename on Hard-Drive: MNTB_2GDK70416_GT071_STN_1_A1_153751

No. of camera stills: 14 Stills folder name: GT071_STN_1

	GPS Time hh:mm		Fix No	Position in Lat/Long (WGS84)	DV tape counter Mins	Secs
Start of Video (SOV)	15	40	3862	50⁰ 06·3266′ N; 5⁰ 32·2924′ W	n/a	n/a
End of Video (EOV)	15	45	3875	50⁰ 06·3893′ N; 5⁰ 32·2093′ W	n/a	n/a

Visual / Video notes: (ground-type, terrain, visibility, species, FOCI, sketch of transect)

Broad-scale habitats observed

Infralittoral Rock ✓		Circalittoral Rock		Sediment habitats		Others	
high energy		high energy		subtidal mixed		macrophyte dominated sed's	✓
mod.energy		mod.energy		subtidal coarse			
low energy		low energy		subtidal mud		biogenic reef	
				subtidal sand	✓	deep-sea bed	

Completed by: K· Arnold Checked by: N· Godsell Entered by: K· Arnold

7.6 Video Survey Metadata

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
Sampling Gear: SeaSpyder Drop Camera, FOV Scale: 4 x laser points arranged in an approx square 22.5 cm (left) x 19 cm (furthest from camera) x 19 cm (right) x 20 cm (closest to camera)										
03/07/2018	07:57:11	NDLS22	50.69416	-1.54734	1	4536	Start of Line (SoL)	NDLS_2GDK70703_GT022_STN_1_A1_01.JPG	5.07	1.35
03/07/2018	07:57:24	NDLS22	50.69420	-1.54722	1	4537		NDLS_2GDK70703_GT022_STN_1_A1_02.JPG	5.17	1.38
03/07/2018	07:57:36	NDLS22	50.69424	-1.54712	1	4538		NDLS_2GDK70703_GT022_STN_1_A1_03.JPG	5.48	1.30
03/07/2018	07:58:18	NDLS22	50.69437	-1.54687	1	4539		NDLS_2GDK70703_GT022_STN_1_A1_04.JPG	6.64	1.05
03/07/2018	07:58:33	NDLS22	50.69444	-1.54680	1	4540		NDLS_2GDK70703_GT022_STN_1_A1_05.JPG	6.02	1.19
03/07/2018	07:58:47	NDLS22	50.69451	-1.54674	1	4541		NDLS_2GDK70703_GT022_STN_1_A1_06.JPG	5.32	1.26
03/07/2018	07:59:09	NDLS22	50.69462	-1.54667	1	4542		NDLS_2GDK70703_GT022_STN_1_A1_07.JPG	5.49	1.12
03/07/2018	07:59:21	NDLS22	50.69467	-1.54665	1	4543		NDLS_2GDK70703_GT022_STN_1_A1_08.JPG	6.22	0.97
03/07/2018	07:59:40	NDLS22	50.69475	-1.54663	1	4544		NDLS_2GDK70703_GT022_STN_1_A1_09.JPG	8.93	0.87
03/07/2018	08:00:01	NDLS22	50.69484	-1.54664	1	4545		NDLS_2GDK70703_GT022_STN_1_A1_10.JPG	10.30	0.84
03/07/2018	08:00:06	NDLS22	50.69485	-1.54664	1	4546	End of Line (EoL)	NDLS_2GDK70703_GT022_STN_1_A1_11.JPG	10.65	0.79
03/07/2018	08:07:02	NDLS27_1	50.69269	-1.54928	2	4547	SoL	NDLS_2GDK70703_GT027_STN_2_A1_01.JPG	10.57	2.08
03/07/2018	08:07:18	NDLS27_1	50.69281	-1.54931	2	4548	EoL	NDLS_2GDK70703_GT027_STN_2_A1_02.JPG	10.24	1.85
03/07/2018	08:24:18	NDLS16	50.67389	-1.57142	3	4549	SoL	NDLS_2GDK70703_GT016_STN_3_A1_01.JPG	5.37	1.58
03/07/2018	08:24:27	NDLS16	50.67394	-1.57139	3	4550		NDLS_2GDK70703_GT016_STN_3_A1_02.JPG	5.34	1.40
03/07/2018	08:24:36	NDLS16	50.67399	-1.57137	3	4551		NDLS_2GDK70703_GT016_STN_3_A1_03.JPG	5.29	1.28
03/07/2018	08:24:46	NDLS16	50.67405	-1.57136	3	4552		NDLS_2GDK70703_GT016_STN_3_A1_04.JPG	5.23	1.28
03/07/2018	08:24:57	NDLS16	50.67412	-1.57134	3	4553		NDLS_2GDK70703_GT016_STN_3_A1_05.JPG	5.19	1.32
03/07/2018	08:25:22	NDLS16	50.67425	-1.57132	3	4554		NDLS_2GDK70703_GT016_STN_3_A1_06.JPG	5.57	1.18
03/07/2018	08:25:36	NDLS16	50.67433	-1.57132	3	4555		NDLS_2GDK70703_GT016_STN_3_A1_07.JPG	5.65	1.18

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	08:25:54	NDLS16	50.67444	-1.57135	3	4556		NDLS_2GDK70703_GT016_STN_3_A1_08.JPG	5.87	1.25
03/07/2018	08:26:24	NDLS16	50.67461	-1.57141	3	4557		NDLS_2GDK70703_GT016_STN_3_A1_09.JPG	7.71	1.30
03/07/2018	08:26:38	NDLS16	50.67469	-1.57143	3	4558	EoL	NDLS_2GDK70703_GT016_STN_3_A1_10.JPG	8.27	1.34
03/07/2018	08:43:28	NDLS30_1	50.67309	-1.58235	4	4559	SoL	NDLS_2GDK70703_GT030_STN_4_A1_01.JPG	12.73	2.09
03/07/2018	08:43:45	NDLS30_1	50.67320	-1.58214	4	4560		NDLS_2GDK70703_GT030_STN_4_A1_02.JPG	11.93	2.26
03/07/2018	08:44:06	NDLS30_1	50.67336	-1.58190	4	4561		NDLS_2GDK70703_GT030_STN_4_A1_03.JPG	12.58	2.15
03/07/2018	08:44:30	NDLS30_1	50.67353	-1.58162	4	4562	EoL	NDLS_2GDK70703_GT030_STN_4_A1_04.JPG	13.38	2.27
03/07/2018	08:49:29	NDLS30_2	50.67249	-1.58300	4	4563	SoL	NDLS_2GDK70703_GT030_STN_4_A2_01.JPG	12.82	2.14
03/07/2018	08:49:49	NDLS30_2	50.67260	-1.58278	4	4564		NDLS_2GDK70703_GT030_STN_4_A2_02.JPG	12.62	2.08
03/07/2018	08:49:57	NDLS30_2	50.67265	-1.58267	4	4565		NDLS_2GDK70703_GT030_STN_4_A2_03.JPG	12.77	2.23
03/07/2018	08:50:07	NDLS30_2	50.67271	-1.58254	4	4566		NDLS_2GDK70703_GT030_STN_4_A2_04.JPG	12.80	2.20
03/07/2018	08:50:15	NDLS30_2	50.67276	-1.58242	4	4567		NDLS_2GDK70703_GT030_STN_4_A2_05.JPG	12.50	2.33
03/07/2018	08:50:25	NDLS30_2	50.67281	-1.58230	4	4568		NDLS_2GDK70703_GT030_STN_4_A2_06.JPG	12.69	2.04
03/07/2018	08:50:32	NDLS30_2	50.67285	-1.58222	4	4569		NDLS_2GDK70703_GT030_STN_4_A2_07.JPG	12.78	2.14
03/07/2018	08:50:39	NDLS30_2	50.67290	-1.58212	4	4570		NDLS_2GDK70703_GT030_STN_4_A2_08.JPG	12.67	2.20
03/07/2018	08:50:47	NDLS30_2	50.67294	-1.58202	4	4571		NDLS_2GDK70703_GT030_STN_4_A2_09.JPG	12.03	2.19
03/07/2018	08:50:55	NDLS30_2	50.67299	-1.58193	4	4572		NDLS_2GDK70703_GT030_STN_4_A2_10.JPG	11.79	2.22
03/07/2018	08:51:04	NDLS30_2	50.67306	-1.58179	4	4573		NDLS_2GDK70703_GT030_STN_4_A2_11.JPG	12.11	2.28
03/07/2018	08:51:14	NDLS30_2	50.67312	-1.58166	4	4574		NDLS_2GDK70703_GT030_STN_4_A2_12.JPG	12.63	2.29
03/07/2018	08:51:25	NDLS30_2	50.67318	-1.58152	4	4575	EoL	NDLS_2GDK70703_GT030_STN_4_A2_13.JPG	13.54	2.14
03/07/2018	09:00:11	NDLS14	50.66774	-1.57681	5	4576	SoL	NDLS_2GDK70703_GT014_STN_5_A1_01.JPG	8.59	1.43
03/07/2018	09:00:33	NDLS14	50.66764	-1.57675	5	4577		NDLS_2GDK70703_GT014_STN_5_A1_02.JPG	8.01	0.87
03/07/2018	09:00:45	NDLS14	50.66757	-1.57672	5	4578		NDLS_2GDK70703_GT014_STN_5_A1_03.JPG	8.26	1.41
03/07/2018	09:01:03	NDLS14	50.66747	-1.57667	5	4579		NDLS_2GDK70703_GT014_STN_5_A1_04.JPG	9.20	1.17
03/07/2018	09:01:16	NDLS14	50.66738	-1.57667	5	4580		NDLS_2GDK70703_GT014_STN_5_A1_05.JPG	9.34	1.40
03/07/2018	09:01:26	NDLS14	50.66733	-1.57668	5	4581		NDLS_2GDK70703_GT014_STN_5_A1_06.JPG	9.37	1.18

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	09:01:35	NDLS14	50.66727	-1.57670	5	4582		NDLS_2GDK70703_GT014_STN_5_A1_07.JPG	9.26	1.35
03/07/2018	09:01:48	NDLS14	50.66720	-1.57673	5	4583		NDLS_2GDK70703_GT014_STN_5_A1_08.JPG	9.20	1.32
03/07/2018	09:01:58	NDLS14	50.66714	-1.57676	5	4584		NDLS_2GDK70703_GT014_STN_5_A1_09.JPG	9.42	1.18
03/07/2018	09:02:09	NDLS14	50.66709	-1.57677	5	4585		NDLS_2GDK70703_GT014_STN_5_A1_10.JPG	9.41	1.19
03/07/2018	09:02:18	NDLS14	50.66704	-1.57679	5	4586		NDLS_2GDK70703_GT014_STN_5_A1_11.JPG	9.22	1.20
03/07/2018	09:02:28	NDLS14	50.66699	-1.57680	5	4587		NDLS_2GDK70703_GT014_STN_5_A1_12.JPG	9.27	0.93
03/07/2018	09:02:39	NDLS14	50.66693	-1.57681	5	4588		NDLS_2GDK70703_GT014_STN_5_A1_13.JPG	9.07	1.23
03/07/2018	09:02:49	NDLS14	50.66688	-1.57683	5	4589	EoL	NDLS_2GDK70703_GT014_STN_5_A1_14.JPG	8.78	1.12
03/07/2018	09:07:18	NDLS13	50.66545	-1.58107	6	4590	SoL	NDLS_2GDK70703_GT013_STN_6_A1_01.JPG	10.37	1.49
03/07/2018	09:07:30	NDLS13	50.66545	-1.58120	6	4591		NDLS_2GDK70703_GT013_STN_6_A1_02.JPG	9.68	1.39
03/07/2018	09:07:41	NDLS13	50.66545	-1.58130	6	4592		NDLS_2GDK70703_GT013_STN_6_A1_03.JPG	10.17	1.26
03/07/2018	09:07:52	NDLS13	50.66545	-1.58139	6	4593		NDLS_2GDK70703_GT013_STN_6_A1_04.JPG	10.36	1.13
03/07/2018	09:08:07	NDLS13	50.66545	-1.58150	6	4594		NDLS_2GDK70703_GT013_STN_6_A1_05.JPG	10.52	0.98
03/07/2018	09:08:23	NDLS13	50.66542	-1.58162	6	4595		NDLS_2GDK70703_GT013_STN_6_A1_06.JPG	10.23	1.12
03/07/2018	09:08:36	NDLS13	50.66540	-1.58172	6	4596		NDLS_2GDK70703_GT013_STN_6_A1_07.JPG	10.47	1.10
03/07/2018	09:08:50	NDLS13	50.66538	-1.58181	6	4597		NDLS_2GDK70703_GT013_STN_6_A1_08.JPG	10.41	0.96
03/07/2018	09:09:09	NDLS13	50.66535	-1.58194	6	4598		NDLS_2GDK70703_GT013_STN_6_A1_09.JPG	10.62	0.97
03/07/2018	09:09:30	NDLS13	50.66535	-1.58211	6	4599		NDLS_2GDK70703_GT013_STN_6_A1_10.JPG	10.46	1.03
03/07/2018	09:09:53	NDLS13	50.66534	-1.58225	6	4600		NDLS_2GDK70703_GT013_STN_6_A1_11.JPG	11.03	0.77
03/07/2018	09:10:10	NDLS13	50.66533	-1.58235	6	4601		NDLS_2GDK70703_GT013_STN_6_A1_12.JPG	10.74	0.76
03/07/2018	09:10:37	NDLS13	50.66534	-1.58252	6	4602		NDLS_2GDK70703_GT013_STN_6_A1_13.JPG	10.45	1.18
03/07/2018	09:11:06	NDLS13	50.66535	-1.58273	6	4603		NDLS_2GDK70703_GT013_STN_6_A1_14.JPG	10.84	0.86
03/07/2018	09:11:39	NDLS13	50.66534	-1.58293	6	4604		NDLS_2GDK70703_GT013_STN_6_A1_15.JPG	11.17	0.76
03/07/2018	09:12:07	NDLS13	50.66533	-1.58306	6	4605		NDLS_2GDK70703_GT013_STN_6_A1_16.JPG	11.27	0.67
03/07/2018	09:12:18	NDLS13	50.66532	-1.58311	6	4606	EoL	NDLS_2GDK70703_GT013_STN_6_A1_17.JPG	11.12	0.57
03/07/2018	09:16:19	NDLS15_1	50.66672	-1.58675	7	4607	SoL	NDLS_2GDK70703_GT015_STN_7_A1_01.JPG	16.32	0.61

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	09:17:29	NDLS15_1	50.66683	-1.58716	7	4608		NDLS_2GDK70703_GT015_STN_7_A1_02.JPG	13.49	0.75
03/07/2018	09:17:37	NDLS15_1	50.66684	-1.58719	7	4609		NDLS_2GDK70703_GT015_STN_7_A1_03.JPG	13.74	0.66
03/07/2018	09:17:53	NDLS15_1	50.66689	-1.58726	7	4610	EoL	NDLS_2GDK70703_GT015_STN_7_A1_04.JPG	15.04	1.05
03/07/2018	09:26:01	NDLS15_3	50.66623	-1.58851	7	4611	SoL	NDLS_2GDK70703_GT015_STN_7_A3_01.JPG	14.46	0.00
03/07/2018	09:26:25	NDLS15_3	50.66624	-1.58849	7	4612		NDLS_2GDK70703_GT015_STN_7_A3_02.JPG	14.25	0.23
03/07/2018	09:27:13	NDLS15_3	50.66631	-1.58839	7	4613		NDLS_2GDK70703_GT015_STN_7_A3_03.JPG	14.12	0.54
03/07/2018	09:27:50	NDLS15_3	50.66638	-1.58827	7	4614		NDLS_2GDK70703_GT015_STN_7_A3_04.JPG	13.95	0.61
03/07/2018	09:28:29	NDLS15_3	50.66645	-1.58815	7	4615		NDLS_2GDK70703_GT015_STN_7_A3_05.JPG	13.39	0.48
03/07/2018	09:29:03	NDLS15_3	50.66653	-1.58807	7	4616		NDLS_2GDK70703_GT015_STN_7_A3_06.JPG	14.11	0.65
03/07/2018	09:29:34	NDLS15_3	50.66663	-1.58799	7	4617		NDLS_2GDK70703_GT015_STN_7_A3_07.JPG	14.74	0.84
03/07/2018	09:30:02	NDLS15_3	50.66673	-1.58789	7	4618		NDLS_2GDK70703_GT015_STN_7_A3_08.JPG	15.29	0.96
03/07/2018	09:30:33	NDLS15_3	50.66684	-1.58779	7	4619		NDLS_2GDK70703_GT015_STN_7_A3_09.JPG	13.37	1.00
03/07/2018	09:31:08	NDLS15_3	50.66699	-1.58764	7	4620		NDLS_2GDK70703_GT015_STN_7_A3_10.JPG	14.69	1.09
03/07/2018	09:31:27	NDLS15_3	50.66706	-1.58758	7	4621		NDLS_2GDK70703_GT015_STN_7_A3_11.JPG	15.52	0.96
03/07/2018	09:31:51	NDLS15_3	50.66715	-1.58751	7	4622	EoL	NDLS_2GDK70703_GT015_STN_7_A3_12.JPG	15.71	0.98
03/07/2018	09:39:45	NDLS11	50.66457	-1.58951	8	4623	SoL	NDLS_2GDK70703_GT011_STN_8_A1_01.JPG	12.05	0.94
03/07/2018	09:40:04	NDLS11	50.66461	-1.58963	8	4624		NDLS_2GDK70703_GT011_STN_8_A1_02.JPG	12.14	0.97
03/07/2018	09:40:15	NDLS11	50.66462	-1.58970	8	4625		NDLS_2GDK70703_GT011_STN_8_A1_03.JPG	11.91	0.87
03/07/2018	09:40:32	NDLS11	50.66462	-1.58981	8	4626		NDLS_2GDK70703_GT011_STN_8_A1_04.JPG	12.07	0.89
03/07/2018	09:40:44	NDLS11	50.66462	-1.58986	8	4627		NDLS_2GDK70703_GT011_STN_8_A1_05.JPG	12.39	0.52
03/07/2018	09:41:14	NDLS11	50.66467	-1.58997	8	4628		NDLS_2GDK70703_GT011_STN_8_A1_06.JPG	12.34	0.62
03/07/2018	09:41:47	NDLS11	50.66471	-1.59008	8	4629		NDLS_2GDK70703_GT011_STN_8_A1_07.JPG	12.38	0.60
03/07/2018	09:42:28	NDLS11	50.66478	-1.59019	8	4630		NDLS_2GDK70703_GT011_STN_8_A1_08.JPG	12.26	0.45
03/07/2018	09:43:13	NDLS11	50.66483	-1.59031	8	4631		NDLS_2GDK70703_GT011_STN_8_A1_09.JPG	12.41	0.53
03/07/2018	09:44:04	NDLS11	50.66492	-1.59038	8	4632		NDLS_2GDK70703_GT011_STN_8_A1_10.JPG	11.20	0.53
03/07/2018	09:44:53	NDLS11	50.66505	-1.59041	8	4633		NDLS_2GDK70703_GT011_STN_8_A1_11.JPG	11.73	0.62

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	09:45:39	NDLS11	50.66518	-1.59045	8	4634		NDLS_2GDK70703_GT011_STN_8_A1_12.JPG	12.64	0.74
03/07/2018	09:46:13	NDLS11	50.66533	-1.59043	8	4635		NDLS_2GDK70703_GT011_STN_8_A1_13.JPG	13.86	1.00
03/07/2018	09:46:45	NDLS11	50.66547	-1.59033	8	4636		NDLS_2GDK70703_GT011_STN_8_A1_14.JPG	13.76	1.08
03/07/2018	09:47:12	NDLS11	50.66559	-1.59025	8	4637	EoL	NDLS_2GDK70703_GT011_STN_8_A1_15.JPG	13.94	1.16
03/07/2018	10:19:30	NDLS12	50.66357	-1.59543	9	4638	SoL	NDLS_2GDK70703_GT012_STN_9_A1_01.JPG	15.30	1.13
03/07/2018	10:19:45	NDLS12	50.66367	-1.59540	9	4639		NDLS_2GDK70703_GT012_STN_9_A1_02.JPG	15.41	1.40
03/07/2018	10:20:04	NDLS12	50.66378	-1.59537	9	4640		NDLS_2GDK70703_GT012_STN_9_A1_03.JPG	14.97	1.59
03/07/2018	10:20:16	NDLS12	50.66387	-1.59534	9	4641		NDLS_2GDK70703_GT012_STN_9_A1_04.JPG	14.83	1.46
03/07/2018	10:20:29	NDLS12	50.66396	-1.59530	9	4642		NDLS_2GDK70703_GT012_STN_9_A1_05.JPG	14.29	1.64
03/07/2018	10:20:46	NDLS12	50.66408	-1.59524	9	4643		NDLS_2GDK70703_GT012_STN_9_A1_06.JPG	14.19	1.54
03/07/2018	10:21:03	NDLS12	50.66420	-1.59519	9	4644		NDLS_2GDK70703_GT012_STN_9_A1_07.JPG	13.79	1.67
03/07/2018	10:21:21	NDLS12	50.66434	-1.59512	9	4645		NDLS_2GDK70703_GT012_STN_9_A1_08.JPG	15.87	1.75
03/07/2018	10:21:35	NDLS12	50.66445	-1.59509	9	4646		NDLS_2GDK70703_GT012_STN_9_A1_09.JPG	16.66	1.87
03/07/2018	10:21:49	NDLS12	50.66458	-1.59504	9	4647	EoL	NDLS_2GDK70703_GT012_STN_9_A1_10.JPG	16.95	1.90
03/07/2018	10:33:03	NDLS04	50.66087	-1.59924	10	4648	SoL	NDLS_2GDK70703_GT004_STN_10_A1_01.JPG	8.82	2.23
03/07/2018	10:33:59	NDLS04	50.66129	-1.59956	10	4649		NDLS_2GDK70703_GT004_STN_10_A1_02.JPG	8.77	1.78
03/07/2018	10:34:49	NDLS04	50.66167	-1.59969	10	4650	EoL	NDLS_2GDK70703_GT004_STN_10_A1_03.JPG	13.72	1.42
03/07/2018	10:50:12	NDLS17	50.68588	-1.56209	11	4651	SoL	NDLS_2GDK70703_GT017_STN_11_A1_01.JPG	11.99	1.82
03/07/2018	10:50:22	NDLS17	50.68597	-1.56205	11	4652		NDLS_2GDK70703_GT017_STN_11_A1_02.JPG	11.77	2.02
03/07/2018	10:50:35	NDLS17	50.68610	-1.56198	11	4653		NDLS_2GDK70703_GT017_STN_11_A1_03.JPG	11.61	2.22
03/07/2018	10:50:44	NDLS17	50.68619	-1.56193	11	4654		NDLS_2GDK70703_GT017_STN_11_A1_04.JPG	11.63	2.30
03/07/2018	10:50:51	NDLS17	50.68626	-1.56187	11	4655		NDLS_2GDK70703_GT017_STN_11_A1_05.JPG	11.46	2.33
03/07/2018	10:50:58	NDLS17	50.68633	-1.56181	11	4656		NDLS_2GDK70703_GT017_STN_11_A1_06.JPG	10.74	2.39
03/07/2018	10:51:17	NDLS17	50.68651	-1.56167	11	4657		NDLS_2GDK70703_GT017_STN_11_A1_07.JPG	9.31	2.30
03/07/2018	10:51:38	NDLS17	50.68669	-1.56155	11	4658		NDLS_2GDK70703_GT017_STN_11_A1_08.JPG	13.24	1.97
03/07/2018	10:51:50	NDLS17	50.68679	-1.56148	11	4659		NDLS_2GDK70703_GT017_STN_11_A1_09.JPG	13.82	1.92

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	10:52:02	NDLS17	50.68689	-1.56140	11	4660		NDLS_2GDK70703_GT017_STN_11_A1_10.JPG	13.80	2.06
03/07/2018	10:52:12	NDLS17	50.68697	-1.56133	11	4661	EoL	NDLS_2GDK70703_GT017_STN_11_A1_11.JPG	13.75	2.00
03/07/2018	11:00:52	NDLS28_1	50.68711	-1.56213	12	4662	SoL	NDLS_2GDK70703_GT028_STN_12_A1_01.JPG	11.34	1.86
03/07/2018	11:01:04	NDLS28_1	50.68723	-1.56205	12	4663		NDLS_2GDK70703_GT028_STN_12_A1_02.JPG	11.81	2.09
03/07/2018	11:01:30	NDLS28_1	50.68745	-1.56185	12	4664	EoL	NDLS_2GDK70703_GT028_STN_12_A1_03.JPG	10.73	2.02
03/07/2018	11:07:43	NDLS28_2	50.68716	-1.56272	12	4665	SoL	NDLS_2GDK70703_GT028_STN_12_A2_01.JPG	13.26	1.84
03/07/2018	11:07:52	NDLS28_2	50.68725	-1.56269	12	4666		NDLS_2GDK70703_GT028_STN_12_A2_02.JPG	11.80	2.00
03/07/2018	11:09:11	NDLS28_2	50.68777	-1.56220	12	4667		NDLS_2GDK70703_GT028_STN_12_A2_03.JPG	21.63	1.49
03/07/2018	11:09:29	NDLS28_2	50.68788	-1.56210	12	4668		NDLS_2GDK70703_GT028_STN_12_A2_04.JPG	23.43	1.39
03/07/2018	11:09:47	NDLS28_2	50.68798	-1.56206	12	4669		NDLS_2GDK70703_GT028_STN_12_A2_05.JPG	25.24	1.29
03/07/2018	11:10:05	NDLS28_2	50.68809	-1.56204	12	4670		NDLS_2GDK70703_GT028_STN_12_A2_06.JPG	26.37	1.24
03/07/2018	11:10:16	NDLS28_2	50.68815	-1.56200	12	4671		NDLS_2GDK70703_GT028_STN_12_A2_07.JPG	26.67	1.24
03/07/2018	11:10:30	NDLS28_2	50.68821	-1.56194	12	4672		NDLS_2GDK70703_GT028_STN_12_A2_08.JPG	26.81	1.18
03/07/2018	11:10:46	NDLS28_2	50.68828	-1.56185	12	4673		NDLS_2GDK70703_GT028_STN_12_A2_09.JPG	26.84	1.19
03/07/2018	11:11:01	NDLS28_2	50.68834	-1.56178	12	4674		NDLS_2GDK70703_GT028_STN_12_A2_10.JPG	26.89	1.06
03/07/2018	11:11:14	NDLS28_2	50.68840	-1.56174	12	4675		NDLS_2GDK70703_GT028_STN_12_A2_11.JPG	26.70	1.03
03/07/2018	11:11:28	NDLS28_2	50.68845	-1.56169	12	4676		NDLS_2GDK70703_GT028_STN_12_A2_12.JPG	26.15	1.04
03/07/2018	11:11:42	NDLS28_2	50.68852	-1.56162	12	4677		NDLS_2GDK70703_GT028_STN_12_A2_13.JPG	25.85	1.17
03/07/2018	11:12:28	NDLS28_2	50.68874	-1.56138	12	4678	EoL	NDLS_2GDK70703_GT028_STN_12_A2_14.JPG	23.90	1.37
03/07/2018	11:21:11	NDLS18_1	50.68504	-1.56000	13	4679	SoL	NDLS_2GDK70703_GT018_STN_13_A1_01.JPG	15.45	1.49
03/07/2018	11:21:21	NDLS18_1	50.68511	-1.55994	13	4680		NDLS_2GDK70703_GT018_STN_13_A1_02.JPG	15.01	1.72
03/07/2018	11:21:34	NDLS18_1	50.68522	-1.55985	13	4681	EoL	NDLS_2GDK70703_GT018_STN_13_A1_03.JPG	13.32	2.08
03/07/2018	11:28:45	NDLS29	50.68476	-1.55517	14	4682	SoL	NDLS_2GDK70703_GT029_STN_14_A1_01.JPG	8.78	0.93
03/07/2018	11:28:55	NDLS29	50.68480	-1.55511	14	4683		NDLS_2GDK70703_GT029_STN_14_A1_02.JPG	8.38	1.11
03/07/2018	11:29:11	NDLS29	50.68488	-1.55500	14	4684		NDLS_2GDK70703_GT029_STN_14_A1_03.JPG	7.78	1.48
03/07/2018	11:29:26	NDLS29	50.68497	-1.55489	14	4685		NDLS_2GDK70703_GT029_STN_14_A1_04.JPG	6.62	1.69

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	11:29:40	NDLS29	50.68506	-1.55480	14	4686		NDLS_2GDK70703_GT029_STN_14_A1_05.JPG	6.92	1.62
03/07/2018	11:29:54	NDLS29	50.68515	-1.55473	14	4687		NDLS_2GDK70703_GT029_STN_14_A1_06.JPG	7.20	1.59
03/07/2018	11:30:05	NDLS29	50.68523	-1.55467	14	4688		NDLS_2GDK70703_GT029_STN_14_A1_07.JPG	7.03	1.71
03/07/2018	11:30:19	NDLS29	50.68534	-1.55461	14	4689		NDLS_2GDK70703_GT029_STN_14_A1_08.JPG	6.38	1.80
03/07/2018	11:30:34	NDLS29	50.68545	-1.55454	14	4690		NDLS_2GDK70703_GT029_STN_14_A1_09.JPG	7.65	1.64
03/07/2018	11:30:47	NDLS29	50.68554	-1.55449	14	4691		NDLS_2GDK70703_GT029_STN_14_A1_10.JPG	8.98	1.64
03/07/2018	11:31:00	NDLS29	50.68563	-1.55443	14	4692		NDLS_2GDK70703_GT029_STN_14_A1_11.JPG	9.01	1.60
03/07/2018	11:31:14	NDLS29	50.68572	-1.55437	14	4693	EoL	NDLS_2GDK70703_GT029_STN_14_A1_12.JPG	9.41	1.54
03/07/2018	12:16:10	NDLS19	50.68228	-1.54748	15	4694	SoL	NDLS_2GDK70703_GT019_STN_15_A1_01.JPG	4.75	0.94
03/07/2018	12:16:24	NDLS19	50.68233	-1.54744	15	4695		NDLS_2GDK70703_GT019_STN_15_A1_02.JPG	4.74	0.88
03/07/2018	12:16:43	NDLS19	50.68240	-1.54741	15	4696		NDLS_2GDK70703_GT019_STN_15_A1_03.JPG	4.68	0.86
03/07/2018	12:16:59	NDLS19	50.68246	-1.54739	15	4697		NDLS_2GDK70703_GT019_STN_15_A1_04.JPG	4.67	0.76
03/07/2018	12:17:21	NDLS19	50.68253	-1.54736	15	4698		NDLS_2GDK70703_GT019_STN_15_A1_05.JPG	4.61	0.61
03/07/2018	12:17:49	NDLS19	50.68260	-1.54734	15	4699		NDLS_2GDK70703_GT019_STN_15_A1_06.JPG	4.44	0.59
03/07/2018	12:18:16	NDLS19	50.68267	-1.54735	15	4700		NDLS_2GDK70703_GT019_STN_15_A1_07.JPG	4.27	0.57
03/07/2018	12:18:44	NDLS19	50.68274	-1.54737	15	4701		NDLS_2GDK70703_GT019_STN_15_A1_08.JPG	4.28	0.65
03/07/2018	12:19:19	NDLS19	50.68284	-1.54742	15	4702		NDLS_2GDK70703_GT019_STN_15_A1_09.JPG	3.63	0.68
03/07/2018	12:19:54	NDLS19	50.68295	-1.54751	15	4703		NDLS_2GDK70703_GT019_STN_15_A1_10.JPG	4.74	0.85
03/07/2018	12:20:27	NDLS19	50.68305	-1.54760	15	4704		NDLS_2GDK70703_GT019_STN_15_A1_11.JPG	4.42	0.58
03/07/2018	12:20:55	NDLS19	50.68312	-1.54763	15	4705		NDLS_2GDK70703_GT019_STN_15_A1_12.JPG	4.51	0.57
03/07/2018	12:21:31	NDLS19	50.68322	-1.54764	15	4706		NDLS_2GDK70703_GT019_STN_15_A1_13.JPG	4.73	0.69
03/07/2018	12:22:06	NDLS19	50.68333	-1.54767	15	4707		NDLS_2GDK70703_GT019_STN_15_A1_14.JPG	5.21	0.72
03/07/2018	12:22:39	NDLS19	50.68344	-1.54770	15	4708		NDLS_2GDK70703_GT019_STN_15_A1_15.JPG	5.62	0.70
03/07/2018	12:23:17	NDLS19	50.68355	-1.54773	15	4709	EoL	NDLS_2GDK70703_GT019_STN_15_A1_16.JPG	5.21	0.68
03/07/2018	12:27:47	NDLS40 (Recored as 19 on HP)	50.68399	-1.54703	16	4710	No Line	NDLS_2GDK70703_GT040_STN_16_A1_01.JPG	5.08	0.25
03/07/2018	12:30:50	NDLS38	50.68239	-1.54697	17	4711	No Line	NDLS_2GDK70703_GT038_STN_17_A1_01.JPG	4.36	0.31

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	12:34:22	NDLS39	50.68176	-1.54712	18	4712	No Line	NDLS_2GDK70703_GT039_STN_18_A1_01.JPG	4.34	0.00
03/07/2018	12:36:54	NDLS42	50.68214	-1.54892	19	4713	No Line	NDLS_2GDK70703_GT042_STN_19_A1_01.JPG	5.35	1.04
03/07/2018	12:38:37	NDLS41	50.68247	-1.54920	20	4714	No Line	NDLS_2GDK70703_GT041_STN_20_A1_01.JPG	5.42	0.38
03/07/2018	12:40:38	NDLS43	50.68203	-1.54995	21	4715	No Line	NDLS_2GDK70703_GT043_STN_21_A1_01.JPG	5.95	0.63
03/07/2018	12:45:00	NDLS44	50.68437	-1.55088	22	4716	No Line	NDLS_2GDK70703_GT044_STN_22_A1_01.JPG	7.10	0.53
03/07/2018	12:49:34	NDLS20	50.68545	-1.54669	23	4717	SoL	NDLS_2GDK70703_GT020_STN_23_A1_01.JPG	6.06	1.81
03/07/2018	12:49:47	NDLS20	50.68555	-1.54667	23	4718		NDLS_2GDK70703_GT020_STN_23_A1_02.JPG	6.15	1.60
03/07/2018	12:50:02	NDLS20	50.68563	-1.54665	23	4719		NDLS_2GDK70703_GT020_STN_23_A1_03.JPG	5.90	1.17
03/07/2018	12:50:22	NDLS20	50.68573	-1.54663	23	4720		NDLS_2GDK70703_GT020_STN_23_A1_04.JPG	5.74	1.04
03/07/2018	12:50:51	NDLS20	50.68585	-1.54662	23	4721		NDLS_2GDK70703_GT020_STN_23_A1_05.JPG	5.46	0.98
03/07/2018	12:51:22	NDLS20	50.68597	-1.54662	23	4722		NDLS_2GDK70703_GT020_STN_23_A1_06.JPG	5.68	0.79
03/07/2018	12:51:56	NDLS20	50.68610	-1.54664	23	4723		NDLS_2GDK70703_GT020_STN_23_A1_07.JPG	5.82	0.95
03/07/2018	12:52:34	NDLS20	50.68623	-1.54669	23	4724		NDLS_2GDK70703_GT020_STN_23_A1_08.JPG	5.59	0.85
03/07/2018	12:53:19	NDLS20	50.68634	-1.54672	23	4725		NDLS_2GDK70703_GT020_STN_23_A1_09.JPG	5.80	0.68
03/07/2018	12:53:54	NDLS20	50.68647	-1.54676	23	4726		NDLS_2GDK70703_GT020_STN_23_A1_10.JPG	6.36	0.92
03/07/2018	12:54:29	NDLS20	50.68660	-1.54685	23	4727		NDLS_2GDK70703_GT020_STN_23_A1_11.JPG	6.84	0.89
03/07/2018	12:54:58	NDLS20	50.68672	-1.54693	23	4728	EoL	NDLS_2GDK70703_GT020_STN_23_A1_12.JPG	7.21	0.89
03/07/2018	13:02:39	NDLS23	50.69223	-1.54306	24	4729	SoL	NDLS_2GDK70703_GT023_STN_24_A1_01.JPG	7.33	1.21
03/07/2018	13:02:54	NDLS23	50.69230	-1.54309	24	4730		NDLS_2GDK70703_GT023_STN_24_A1_02.JPG	7.67	0.98
03/07/2018	13:03:11	NDLS23	50.69237	-1.54314	24	4731		NDLS_2GDK70703_GT023_STN_24_A1_03.JPG	7.94	1.05
03/07/2018	13:03:30	NDLS23	50.69246	-1.54319	24	4732		NDLS_2GDK70703_GT023_STN_24_A1_04.JPG	8.13	1.04
03/07/2018	13:04:01	NDLS23	50.69258	-1.54329	24	4733		NDLS_2GDK70703_GT023_STN_24_A1_05.JPG	8.15	1.00
03/07/2018	13:04:29	NDLS23	50.69269	-1.54341	24	4734		NDLS_2GDK70703_GT023_STN_24_A1_06.JPG	7.47	0.97
03/07/2018	13:05:02	NDLS23	50.69279	-1.54351	24	4735		NDLS_2GDK70703_GT023_STN_24_A1_07.JPG	7.66	0.86
03/07/2018	13:05:32	NDLS23	50.69291	-1.54360	24	4736		NDLS_2GDK70703_GT023_STN_24_A1_08.JPG	7.21	1.11
03/07/2018	13:05:57	NDLS23	50.69302	-1.54370	24	4737		NDLS_2GDK70703_GT023_STN_24_A1_09.JPG	7.23	1.07

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	13:06:21	NDLS23	50.69310	-1.54380	24	4738		NDLS_2GDK70703_GT023_STN_24_A1_10.JPG	7.51	0.99
03/07/2018	13:06:53	NDLS23	50.69321	-1.54396	24	4739	EoL	NDLS_2GDK70703_GT023_STN_24_A1_11.JPG	7.05	0.96
03/07/2018	13:12:39	NDLS37	50.69112	-1.53969	25	4740		NDLS_2GDK70703_GT037_STN_25_A1_01.JPG	2.98	0.84
03/07/2018	13:22:11	NDLS26_1	50.69413	-1.53651	26	4741	SoL	NDLS_2GDK70703_GT026_STN_26_A1_01.JPG	4.37	1.41
03/07/2018	13:22:23	NDLS26_1	50.69413	-1.53663	26	4742		NDLS_2GDK70703_GT026_STN_26_A1_02.JPG	4.35	1.30
03/07/2018	13:22:36	NDLS26_1	50.69412	-1.53674	26	4743		NDLS_2GDK70703_GT026_STN_26_A1_03.JPG	4.21	1.28
03/07/2018	13:22:48	NDLS26_1	50.69411	-1.53686	26	4744		NDLS_2GDK70703_GT026_STN_26_A1_04.JPG	4.07	1.26
03/07/2018	13:23:12	NDLS26_1	50.69409	-1.53707	26	4745		NDLS_2GDK70703_GT026_STN_26_A1_05.JPG	3.72	1.38
03/07/2018	13:23:24	NDLS26_1	50.69406	-1.53721	26	4746	EoL	NDLS_2GDK70703_GT026_STN_26_A1_06.JPG	3.52	1.57
03/07/2018	13:26:50	NDLS26_2	50.69412	-1.53693	26	4747	SoL	NDLS_2GDK70703_GT026_STN_26_A2_01.JPG	4.41	1.09
03/07/2018	13:27:30	NDLS26_2	50.69423	-1.53684	26	4748		NDLS_2GDK70703_GT026_STN_26_A2_02.JPG	4.21	0.60
03/07/2018	13:27:58	NDLS26_2	50.69429	-1.53674	26	4749		NDLS_2GDK70703_GT026_STN_26_A2_03.JPG	4.41	0.81
03/07/2018	13:28:24	NDLS26_2	50.69433	-1.53663	26	4750		NDLS_2GDK70703_GT026_STN_26_A2_04.JPG	4.12	0.82
03/07/2018	13:28:46	NDLS26_2	50.69437	-1.53650	26	4751		NDLS_2GDK70703_GT026_STN_26_A2_05.JPG	4.03	0.99
03/07/2018	13:29:10	NDLS26_2	50.69441	-1.53638	26	4752		NDLS_2GDK70703_GT026_STN_26_A2_06.JPG	4.14	1.02
03/07/2018	13:29:34	NDLS26_2	50.69446	-1.53626	26	4753		NDLS_2GDK70703_GT026_STN_26_A2_07.JPG	4.00	0.77
03/07/2018	13:29:56	NDLS26_2	50.69454	-1.53621	26	4754		NDLS_2GDK70703_GT026_STN_26_A2_08.JPG	3.98	1.04
03/07/2018	13:30:18	NDLS26_2	50.69460	-1.53609	26	4755		NDLS_2GDK70703_GT026_STN_26_A2_09.JPG	3.75	1.05
03/07/2018	13:30:44	NDLS26_2	50.69466	-1.53593	26	4756		NDLS_2GDK70703_GT026_STN_26_A2_10.JPG	4.02	1.06
03/07/2018	13:31:10	NDLS26_2	50.69470	-1.53580	26	4757		NDLS_2GDK70703_GT026_STN_26_A2_11.JPG	3.97	0.64
03/07/2018	13:31:44	NDLS26_2	50.69477	-1.53563	26	4758	EoL	NDLS_2GDK70703_GT026_STN_26_A2_12.JPG	4.18	0.81
03/07/2018	13:38:22	NDLS24	50.69373	-1.54063	27	4759	SoL	NDLS_2GDK70703_GT024_STN_27_A1_01.JPG	6.27	0.99
03/07/2018	13:38:42	NDLS24	50.69379	-1.54070	27	4760		NDLS_2GDK70703_GT024_STN_27_A1_02.JPG	6.05	0.90
03/07/2018	13:39:08	NDLS24	50.69388	-1.54078	27	4761		NDLS_2GDK70703_GT024_STN_27_A1_03.JPG	6.19	0.87
03/07/2018	13:39:38	NDLS24	50.69401	-1.54077	27	4762		NDLS_2GDK70703_GT024_STN_27_A1_04.JPG	6.09	0.89
03/07/2018	13:40:07	NDLS24	50.69414	-1.54076	27	4763		NDLS_2GDK70703_GT024_STN_27_A1_05.JPG	5.68	0.99

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	13:40:39	NDLS24	50.69426	-1.54077	27	4764		NDLS_2GDK70703_GT024_STN_27_A1_06.JPG	5.60	0.88
03/07/2018	13:41:11	NDLS24	50.69433	-1.54077	27	4765		NDLS_2GDK70703_GT024_STN_27_A1_07.JPG	5.76	0.30
03/07/2018	13:41:50	NDLS24	50.69444	-1.54073	27	4766		NDLS_2GDK70703_GT024_STN_27_A1_08.JPG	5.89	0.79
03/07/2018	13:42:25	NDLS24	50.69456	-1.54070	27	4767		NDLS_2GDK70703_GT024_STN_27_A1_09.JPG	5.40	0.81
03/07/2018	13:42:58	NDLS24	50.69468	-1.54073	27	4768		NDLS_2GDK70703_GT024_STN_27_A1_10.JPG	4.67	0.79
03/07/2018	13:43:22	NDLS24	50.69478	-1.54078	27	4769		NDLS_2GDK70703_GT024_STN_27_A1_11.JPG	3.65	0.95
03/07/2018	13:43:53	NDLS24	50.69490	-1.54098	27	4770	EoL	NDLS_2GDK70703_GT024_STN_27_A1_12.JPG	3.74	1.26
03/07/2018	13:48:07	NDLS25_1	50.69554	-1.54036	28	4771		NDLS_2GDK70703_GT025_STN_28_A1_01.JPG	4.98	2.37
03/07/2018	13:52:00	NDLS25_2	50.69473	-1.54176	28	4772	SoL	NDLS_2GDK70703_GT025_STN_28_A2_02.JPG	5.91	0.84
03/07/2018	13:52:24	NDLS25_2	50.69481	-1.54169	28	4773		NDLS_2GDK70703_GT025_STN_28_A2_03.JPG	5.80	0.78
03/07/2018	13:52:49	NDLS25_2	50.69485	-1.54160	28	4774		NDLS_2GDK70703_GT025_STN_28_A2_04.JPG	5.92	0.79
03/07/2018	13:54:03	NDLS25_2	50.69506	-1.54132	28	4775		NDLS_2GDK70703_GT025_STN_28_A2_05.JPG	3.95	0.59
03/07/2018	13:54:41	NDLS25_2	50.69511	-1.54121	28	4776		NDLS_2GDK70703_GT025_STN_28_A2_06.JPG	3.91	0.64
03/07/2018	13:54:57	NDLS25_2	50.69512	-1.54120	28	4777		NDLS_2GDK70703_GT025_STN_28_A2_07.JPG	3.93	0.16
03/07/2018	13:55:44	NDLS25_2	50.69517	-1.54108	28	4778		NDLS_2GDK70703_GT025_STN_28_A2_08.JPG	4.88	0.56
03/07/2018	13:56:24	NDLS25_2	50.69522	-1.54094	28	4779		NDLS_2GDK70703_GT025_STN_28_A2_09.JPG	4.44	0.72
03/07/2018	13:56:56	NDLS25_2	50.69531	-1.54085	28	4780		NDLS_2GDK70703_GT025_STN_28_A2_10.JPG	4.60	0.91
03/07/2018	13:57:23	NDLS25_2	50.69535	-1.54070	28	4781		NDLS_2GDK70703_GT025_STN_28_A2_11.JPG	4.74	1.09
03/07/2018	13:57:46	NDLS25_2	50.69537	-1.54058	28	4782		NDLS_2GDK70703_GT025_STN_28_A2_12.JPG	4.83	0.85
03/07/2018	13:58:16	NDLS25_2	50.69543	-1.54048	28	4783		NDLS_2GDK70703_GT025_STN_28_A2_13.JPG	5.12	0.84
03/07/2018	13:58:49	NDLS25_2	50.69550	-1.54036	28	4784		NDLS_2GDK70703_GT025_STN_28_A2_14.JPG	5.35	0.91
03/07/2018	13:59:12	NDLS25_2	50.69556	-1.54027	28	4785	EoL	NDLS_2GDK70703_GT025_STN_28_A2_15.JPG	5.27	1.01
03/07/2018	14:07:33	NDLS21_1	50.69173	-1.54811	29	4786	SoL	NDLS_2GDK70703_GT021_STN_29_A1_01.JPG	7.75	0.00
03/07/2018	14:08:02	NDLS21_1	50.69177	-1.54799	29	4787	EoL	NDLS_2GDK70703_GT021_STN_29_A1_02.JPG	6.77	0.81
03/07/2018	14:14:06	NDLS21_2	50.69257	-1.54677	29	4788	SoL	NDLS_2GDK70703_GT021_STN_29_A2_01.JPG	6.99	1.68
03/07/2018	14:14:18	NDLS21_2	50.69251	-1.54689	29	4789		NDLS_2GDK70703_GT021_STN_29_A2_02.JPG	6.41	1.71

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
03/07/2018	14:14:31	NDLS21_2	50.69245	-1.54704	29	4790		NDLS_2GDK70703_GT021_STN_29_A2_03.JPG	5.68	1.88
03/07/2018	14:14:39	NDLS21_2	50.69241	-1.54714	29	4791		NDLS_2GDK70703_GT021_STN_29_A2_04.JPG	5.19	1.99
03/07/2018	14:14:53	NDLS21_2	50.69233	-1.54732	29	4792		NDLS_2GDK70703_GT021_STN_29_A2_05.JPG	4.51	2.17
03/07/2018	14:15:07	NDLS21_2	50.69225	-1.54750	29	4793		NDLS_2GDK70703_GT021_STN_29_A2_06.JPG	6.25	2.12
03/07/2018	14:15:27	NDLS21_2	50.69214	-1.54772	29	4794		NDLS_2GDK70703_GT021_STN_29_A2_07.JPG	6.74	1.95
03/07/2018	14:15:42	NDLS21_2	50.69205	-1.54788	29	4795		NDLS_2GDK70703_GT021_STN_29_A2_08.JPG	7.46	1.86
03/07/2018	14:15:55	NDLS21_2	50.69198	-1.54800	29	4796		NDLS_2GDK70703_GT021_STN_29_A2_09.JPG	7.46	1.77
03/07/2018	14:16:10	NDLS21_2	50.69190	-1.54814	29	4797		NDLS_2GDK70703_GT021_STN_29_A2_10.JPG	7.93	1.71
03/07/2018	14:16:27	NDLS21_2	50.69184	-1.54833	29	4798	EoL	NDLS_2GDK70703_GT021_STN_29_A2_11.JPG	8.25	1.74
03/07/2018	14:22:04	NDLS27_2	50.69312	-1.54854	30	4799	SoL	NDLS_2GDK70703_GT027_STN_30_A2_01.JPG	8.15	2.57
03/07/2018	14:22:13	NDLS27_2	50.69307	-1.54869	30	4800	EoL	NDLS_2GDK70703_GT027_STN_30_A2_02.JPG	8.23	2.66
04/07/2018	07:57:29	NDLS_27_A3	50.69268	-1.54994	31	4803	SoL	NDLS_2GDK70704_GT027_STN_31_A3_01.JPG	10.38	1.15
04/07/2018	07:57:47	NDLS_27_A3	50.69276	-1.54985	31	4804		NDLS_2GDK70704_GT027_STN_31_A3_02.JPG	10.15	1.23
04/07/2018	07:58:00	NDLS_27_A3	50.69282	-1.54979	31	4805		NDLS_2GDK70704_GT027_STN_31_A3_03.JPG	10.32	1.20
04/07/2018	07:58:16	NDLS_27_A3	50.69291	-1.54971	31	4806		NDLS_2GDK70704_GT027_STN_31_A3_04.JPG	10.37	1.30
04/07/2018	07:58:34	NDLS_27_A3	50.69300	-1.54964	31	4807		NDLS_2GDK70704_GT027_STN_31_A3_05.JPG	9.12	1.28
04/07/2018	07:58:57	NDLS_27_A3	50.69314	-1.54955	31	4808		NDLS_2GDK70704_GT027_STN_31_A3_06.JPG	8.44	1.44
04/07/2018	07:59:08	NDLS_27_A3	50.69321	-1.54951	31	4809		NDLS_2GDK70704_GT027_STN_31_A3_07.JPG	7.66	1.48
04/07/2018	07:59:22	NDLS_27_A3	50.69331	-1.54946	31	4810		NDLS_2GDK70704_GT027_STN_31_A3_08.JPG	8.23	1.49
04/07/2018	07:59:37	NDLS_27_A3	50.69340	-1.54940	31	4811		NDLS_2GDK70704_GT027_STN_31_A3_09.JPG	7.08	1.46
04/07/2018	07:59:49	NDLS_27_A3	50.69348	-1.54935	31	4812		NDLS_2GDK70704_GT027_STN_31_A3_10.JPG	9.35	1.55
04/07/2018	08:00:06	NDLS_27_A3	50.69358	-1.54928	31	4813		NDLS_2GDK70704_GT027_STN_31_A3_11.JPG	10.97	1.42
04/07/2018	08:00:21	NDLS_27_A3	50.69367	-1.54921	31	4814	EoL	NDLS_2GDK70704_GT027_STN_31_A3_12.JPG	10.83	1.36
04/07/2018	08:08:22	NDLS18_A2	50.68513	-1.56063	32	4815	SoL	NDLS_2GDK70704_GT018_STN_32_A2_01.JPG	14.79	0.86
04/07/2018	08:08:36	NDLS18_A2	50.68518	-1.56057	32	4816		NDLS_2GDK70704_GT018_STN_32_A2_02.JPG	14.80	1.04
04/07/2018	08:08:54	NDLS18_A2	50.68525	-1.56050	32	4817		NDLS_2GDK70704_GT018_STN_32_A2_03.JPG	13.17	0.97

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	08:09:09	NDLS18_A2	50.68533	-1.56042	32	4818		NDLS_2GDK70704_GT018_STN_32_A2_04.JPG	11.54	1.31
04/07/2018	08:09:25	NDLS18_A2	50.68542	-1.56035	32	4819		NDLS_2GDK70704_GT018_STN_32_A2_05.JPG	9.27	1.37
04/07/2018	08:09:44	NDLS18_A2	50.68554	-1.56027	32	4820		NDLS_2GDK70704_GT018_STN_32_A2_06.JPG	8.37	1.52
04/07/2018	08:10:08	NDLS18_A2	50.68570	-1.56017	32	4821		NDLS_2GDK70704_GT018_STN_32_A2_07.JPG	12.45	1.43
04/07/2018	08:10:29	NDLS18_A2	50.68580	-1.56009	32	4822		NDLS_2GDK70704_GT018_STN_32_A2_08.JPG	14.73	1.04
04/07/2018	08:10:50	NDLS18_A2	50.68589	-1.56002	32	4823		NDLS_2GDK70704_GT018_STN_32_A2_09.JPG	15.98	1.02
04/07/2018	08:11:08	NDLS18_A2	50.68596	-1.55996	32	4824		NDLS_2GDK70704_GT018_STN_32_A2_10.JPG	16.32	1.00
04/07/2018	08:11:34	NDLS18_A2	50.68607	-1.55985	32	4825	EoL	NDLS_2GDK70704_GT018_STN_32_A2_11.JPG	16.42	1.02
04/07/2018	08:33:52	NDLS08	50.66357	-1.60550	33	4826	SoL	NDLS_2GDK70704_GT008_STN_33_A1_01.JPG	16.31	0.98
04/07/2018	08:34:15	NDLS08	50.66367	-1.60542	33	4827		NDLS_2GDK70704_GT008_STN_33_A1_02.JPG	16.39	1.11
04/07/2018	08:34:34	NDLS08	50.66376	-1.60535	33	4828		NDLS_2GDK70704_GT008_STN_33_A1_03.JPG	17.70	1.09
04/07/2018	08:34:52	NDLS08	50.66386	-1.60530	33	4829		NDLS_2GDK70704_GT008_STN_33_A1_04.JPG	17.97	1.16
04/07/2018	08:35:12	NDLS08	50.66396	-1.60524	33	4830		NDLS_2GDK70704_GT008_STN_33_A1_05.JPG	18.43	1.22
04/07/2018	08:35:33	NDLS08	50.66407	-1.60517	33	4831		NDLS_2GDK70704_GT008_STN_33_A1_06.JPG	18.53	1.18
04/07/2018	08:35:51	NDLS08	50.66417	-1.60510	33	4832		NDLS_2GDK70704_GT008_STN_33_A1_07.JPG	18.84	1.20
04/07/2018	08:36:10	NDLS08	50.66426	-1.60504	33	4833		NDLS_2GDK70704_GT008_STN_33_A1_08.JPG	19.42	1.13
04/07/2018	08:36:31	NDLS08	50.66436	-1.60495	33	4834		NDLS_2GDK70704_GT008_STN_33_A1_09.JPG	19.66	1.22
04/07/2018	08:36:51	NDLS08	50.66446	-1.60486	33	4835		NDLS_2GDK70704_GT008_STN_33_A1_10.JPG	19.19	1.19
04/07/2018	08:37:15	NDLS08	50.66457	-1.60476	33	4836	EoL	NDLS_2GDK70704_GT008_STN_33_A1_11.JPG	18.67	1.15
04/07/2018	08:45:02	NDLS07	50.66282	-1.60345	34	4837	SoL	NDLS_2GDK70704_GT007_STN_34_A1_01.JPG	17.30	1.33
04/07/2018	08:45:20	NDLS07	50.66292	-1.60341	34	4838		NDLS_2GDK70704_GT007_STN_34_A1_02.JPG	17.43	1.29
04/07/2018	08:45:40	NDLS07	50.66304	-1.60337	34	4839		NDLS_2GDK70704_GT007_STN_34_A1_03.JPG	18.24	1.25
04/07/2018	08:46:01	NDLS07	50.66316	-1.60333	34	4840		NDLS_2GDK70704_GT007_STN_34_A1_04.JPG	18.78	1.27
04/07/2018	08:46:23	NDLS07	50.66328	-1.60328	34	4841		NDLS_2GDK70704_GT007_STN_34_A1_05.JPG	18.94	1.17
04/07/2018	08:46:45	NDLS07	50.66337	-1.60322	34	4842		NDLS_2GDK70704_GT007_STN_34_A1_06.JPG	18.60	1.04
04/07/2018	08:47:09	NDLS07	50.66348	-1.60313	34	4843		NDLS_2GDK70704_GT007_STN_34_A1_07.JPG	18.44	1.10

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	08:47:27	NDLS07	50.66356	-1.60306	34	4844		NDLS_2GDK70704_GT007_STN_34_A1_08.JPG	18.12	1.11
04/07/2018	08:47:48	NDLS07	50.66366	-1.60299	34	4845		NDLS_2GDK70704_GT007_STN_34_A1_09.JPG	19.26	1.13
04/07/2018	08:48:08	NDLS07	50.66376	-1.60293	34	4846	EoL	NDLS_2GDK70704_GT007_STN_34_A1_10.JPG	20.18	1.18
04/07/2018	08:58:02	NDLS05	50.66000	-1.60667	35	4847	SoL	NDLS_2GDK70704_GT005_STN_35_A1_01.JPG	12.92	1.23
04/07/2018	08:58:20	NDLS05	50.66010	-1.60665	35	4848		NDLS_2GDK70704_GT005_STN_35_A1_02.JPG	12.69	1.18
04/07/2018	08:58:36	NDLS05	50.66019	-1.60663	35	4849		NDLS_2GDK70704_GT005_STN_35_A1_03.JPG	11.89	1.17
04/07/2018	08:58:56	NDLS05	50.66029	-1.60662	35	4850		NDLS_2GDK70704_GT005_STN_35_A1_04.JPG	11.55	1.12
04/07/2018	08:59:15	NDLS05	50.66039	-1.60660	35	4851		NDLS_2GDK70704_GT005_STN_35_A1_05.JPG	10.37	1.18
04/07/2018	08:59:35	NDLS05	50.66050	-1.60658	35	4852		NDLS_2GDK70704_GT005_STN_35_A1_06.JPG	9.83	1.23
04/07/2018	08:59:54	NDLS05	50.66061	-1.60655	35	4853		NDLS_2GDK70704_GT005_STN_35_A1_07.JPG	9.42	1.34
04/07/2018	09:00:07	NDLS05	50.66070	-1.60652	35	4854		NDLS_2GDK70704_GT005_STN_35_A1_08.JPG	8.70	1.40
04/07/2018	09:00:26	NDLS05	50.66083	-1.60649	35	4855		NDLS_2GDK70704_GT005_STN_35_A1_09.JPG	8.79	1.54
04/07/2018	09:00:54	NDLS05	50.66102	-1.60647	35	4857		NDLS_2GDK70704_GT005_STN_35_A1_10.JPG	12.77	1.49
04/07/2018	09:01:15	NDLS05	50.66116	-1.60645	35	4858		NDLS_2GDK70704_GT005_STN_35_A1_11.JPG	14.76	1.48
04/07/2018	09:01:28	NDLS05	50.66124	-1.60643	35	4859	EoL	NDLS_2GDK70704_GT005_STN_35_A1_12.JPG	14.81	1.42
04/07/2018	09:13:10	NDLS06	50.65965	-1.61163	36	4861	SoL	NDLS_2GDK70704_GT006_STN_36_A1_01.JPG	17.89	0.81
04/07/2018	09:13:34	NDLS06	50.65972	-1.61158	36	4862		NDLS_2GDK70704_GT006_STN_36_A1_02.JPG	17.75	0.66
04/07/2018	09:14:00	NDLS06	50.65979	-1.61152	36	4863		NDLS_2GDK70704_GT006_STN_36_A1_03.JPG	17.70	0.66
04/07/2018	09:14:31	NDLS06	50.65989	-1.61146	36	4864		NDLS_2GDK70704_GT006_STN_36_A1_04.JPG	15.93	0.76
04/07/2018	09:15:01	NDLS06	50.65998	-1.61142	36	4865		NDLS_2GDK70704_GT006_STN_36_A1_05.JPG	14.23	0.70
04/07/2018	09:15:31	NDLS06	50.66008	-1.61135	36	4866		NDLS_2GDK70704_GT006_STN_36_A1_06.JPG	12.18	0.77
04/07/2018	09:16:20	NDLS06	50.66025	-1.61122	36	4867		NDLS_2GDK70704_GT006_STN_36_A1_07.JPG	10.40	0.88
04/07/2018	09:16:42	NDLS06	50.66033	-1.61115	36	4868		NDLS_2GDK70704_GT006_STN_36_A1_08.JPG	10.49	0.93
04/07/2018	09:17:06	NDLS06	50.66042	-1.61104	36	4869		NDLS_2GDK70704_GT006_STN_36_A1_09.JPG	11.18	1.07
04/07/2018	09:17:30	NDLS06	50.66053	-1.61097	36	4870		NDLS_2GDK70704_GT006_STN_36_A1_10.JPG	11.41	1.09
04/07/2018	09:17:51	NDLS06	50.66064	-1.61090	36	4871		NDLS_2GDK70704_GT006_STN_36_A1_11.JPG	10.21	1.18

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	09:18:12	NDLS06	50.66074	-1.61083	36	4872	EoL	NDLS_2GDK70704_GT006_STN_36_A1_12.JPG	10.78	1.20
04/07/2018	09:25:35	NDLS09	50.66139	-1.61189	37	4873	SoL	NDLS_2GDK70704_GT009_STN_37_A1_01.JPG	17.76	0.94
04/07/2018	09:25:56	NDLS09	50.66147	-1.61186	37	4874		NDLS_2GDK70704_GT009_STN_37_A1_02.JPG	18.02	0.97
04/07/2018	09:26:16	NDLS09	50.66154	-1.61181	37	4875		NDLS_2GDK70704_GT009_STN_37_A1_03.JPG	18.35	0.69
04/07/2018	09:26:45	NDLS09	50.66164	-1.61172	37	4876		NDLS_2GDK70704_GT009_STN_37_A1_04.JPG	18.29	0.76
04/07/2018	09:27:14	NDLS09	50.66174	-1.61163	37	4877		NDLS_2GDK70704_GT009_STN_37_A1_05.JPG	19.22	0.83
04/07/2018	09:27:44	NDLS09	50.66183	-1.61156	37	4878		NDLS_2GDK70704_GT009_STN_37_A1_06.JPG	18.99	0.74
04/07/2018	09:28:07	NDLS09	50.66191	-1.61148	37	4879		NDLS_2GDK70704_GT009_STN_37_A1_07.JPG	19.34	0.97
04/07/2018	09:28:31	NDLS09	50.66199	-1.61137	37	4880		NDLS_2GDK70704_GT009_STN_37_A1_08.JPG	19.13	0.93
04/07/2018	09:28:56	NDLS09	50.66207	-1.61123	37	4881		NDLS_2GDK70704_GT009_STN_37_A1_09.JPG	19.50	1.06
04/07/2018	09:29:21	NDLS09	50.66213	-1.61109	37	4882		NDLS_2GDK70704_GT009_STN_37_A1_10.JPG	19.34	0.97
04/07/2018	09:29:48	NDLS09	50.66219	-1.61095	37	4883	EoL	NDLS_2GDK70704_GT009_STN_37_A1_11.JPG	19.61	0.89
04/07/2018	09:38:03	NDLS010	50.65886	-1.61543	38	4884	SoL	NDLS_2GDK70704_GT010_STN_38_A1_01.JPG	17.72	1.60
04/07/2018	09:38:30	NDLS010	50.65891	-1.61516	38	4885		NDLS_2GDK70704_GT010_STN_38_A1_02.JPG	17.66	1.70
04/07/2018	09:38:49	NDLS010	50.65899	-1.61496	38	4886		NDLS_2GDK70704_GT010_STN_38_A1_03.JPG	17.93	1.82
04/07/2018	09:39:06	NDLS010	50.65904	-1.61480	38	4887		NDLS_2GDK70704_GT010_STN_38_A1_04.JPG	17.86	1.35
04/07/2018	09:39:25	NDLS010	50.65912	-1.61465	38	4888		NDLS_2GDK70704_GT010_STN_38_A1_05.JPG	17.65	1.53
04/07/2018	09:39:42	NDLS010	50.65916	-1.61452	38	4889		NDLS_2GDK70704_GT010_STN_38_A1_06.JPG	17.55	1.05
04/07/2018	09:40:06	NDLS010	50.65921	-1.61434	38	4890		NDLS_2GDK70704_GT010_STN_38_A1_07.JPG	17.78	1.38
04/07/2018	09:40:27	NDLS010	50.65926	-1.61419	38	4891		NDLS_2GDK70704_GT010_STN_38_A1_08.JPG	17.21	0.98
04/07/2018	09:40:56	NDLS010	50.65940	-1.61397	38	4892		NDLS_2GDK70704_GT010_STN_38_A1_09.JPG	17.61	1.52
04/07/2018	09:41:14	NDLS010	50.65943	-1.61382	38	4893	EoL	NDLS_2GDK70704_GT010_STN_38_A1_10.JPG	17.63	1.14
04/07/2018	09:50:26	NDLS04_A2	50.66059	-1.59882	39	4894	SoL	NDLS_2GDK70704_GT004_STN_39_A2_01.JPG	10.85	1.31
04/07/2018	09:50:46	NDLS04_A2	50.66068	-1.59871	39	4895		NDLS_2GDK70704_GT004_STN_39_A2_02.JPG	9.50	1.35
04/07/2018	09:51:11	NDLS04_A2	50.66084	-1.59860	39	4896		NDLS_2GDK70704_GT004_STN_39_A2_03.JPG	8.32	1.51
04/07/2018	09:51:24	NDLS04_A2	50.66093	-1.59855	39	4897		NDLS_2GDK70704_GT004_STN_39_A2_04.JPG	8.40	1.62

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	09:51:44	NDLS04_A2	50.66108	-1.59848	39	4898		NDLS_2GDK70704_GT004_STN_39_A2_05.JPG	7.60	1.73
04/07/2018	09:51:57	NDLS04_A2	50.66119	-1.59844	39	4899		NDLS_2GDK70704_GT004_STN_39_A2_06.JPG	7.85	1.82
04/07/2018	09:52:14	NDLS04_A2	50.66133	-1.59838	39	4900		NDLS_2GDK70704_GT004_STN_39_A2_07.JPG	7.19	1.83
04/07/2018	09:52:47	NDLS04_A2	50.66159	-1.59822	39	4901		NDLS_2GDK70704_GT004_STN_39_A2_08.JPG	14.77	1.79
04/07/2018	09:53:12	NDLS04_A2	50.66177	-1.59810	39	4902		NDLS_2GDK70704_GT004_STN_39_A2_09.JPG	16.46	1.71
04/07/2018	09:53:30	NDLS04_A2	50.66190	-1.59801	39	4903	EoL	NDLS_2GDK70704_GT004_STN_39_A2_10.JPG	16.33	1.53
04/07/2018	10:01:55	NDLS02	50.65911	-1.59274	40	4904	SoL	NDLS_2GDK70704_GT002_STN_40_A1_01.JPG	9.94	0.97
04/07/2018	10:02:43	NDLS02	50.65927	-1.59268	40	4905		NDLS_2GDK70704_GT002_STN_40_A1_02.JPG	10.16	0.60
04/07/2018	10:02:59	NDLS02	50.65932	-1.59265	40	4906		NDLS_2GDK70704_GT002_STN_40_A1_03.JPG	10.51	0.77
04/07/2018	10:03:18	NDLS02	50.65937	-1.59262	40	4907		NDLS_2GDK70704_GT002_STN_40_A1_04.JPG	10.31	0.71
04/07/2018	10:03:39	NDLS02	50.65944	-1.59259	40	4908		NDLS_2GDK70704_GT002_STN_40_A1_05.JPG	11.54	0.70
04/07/2018	10:04:01	NDLS02	50.65950	-1.59256	40	4909		NDLS_2GDK70704_GT002_STN_40_A1_06.JPG	11.25	0.60
04/07/2018	10:04:25	NDLS02	50.65957	-1.59250	40	4910		NDLS_2GDK70704_GT002_STN_40_A1_07.JPG	9.94	0.70
04/07/2018	10:04:49	NDLS02	50.65964	-1.59246	40	4911		NDLS_2GDK70704_GT002_STN_40_A1_08.JPG	9.21	0.65
04/07/2018	10:05:46	NDLS02	50.65980	-1.59240	40	4912		NDLS_2GDK70704_GT002_STN_40_A1_09.JPG	9.12	0.59
04/07/2018	10:06:10	NDLS02	50.65987	-1.59237	40	4913		NDLS_2GDK70704_GT002_STN_40_A1_10.JPG	8.72	0.68
04/07/2018	10:06:30	NDLS02	50.65993	-1.59235	40	4914		NDLS_2GDK70704_GT002_STN_40_A1_11.JPG	10.19	0.79
04/07/2018	10:06:58	NDLS02	50.66003	-1.59233	40	4915		NDLS_2GDK70704_GT002_STN_40_A1_12.JPG	9.36	0.85
04/07/2018	10:07:13	NDLS02	50.66009	-1.59233	40	4916	EoL	NDLS_2GDK70704_GT002_STN_40_A1_13.JPG	8.65	0.81
04/07/2018	10:13:31	NDLS01	50.65992	-1.59073	41	4918	SoL	NDLS_2GDK70704_GT001_STN_41_A1_01.JPG	9.12	1.07
04/07/2018	10:13:45	NDLS01	50.65998	-1.59069	41	4919		NDLS_2GDK70704_GT001_STN_41_A1_02.JPG	9.00	0.88
04/07/2018	10:14:13	NDLS01	50.66011	-1.59060	41	4920		NDLS_2GDK70704_GT001_STN_41_A1_03.JPG	8.75	1.22
04/07/2018	10:14:51	NDLS01	50.66034	-1.59040	41	4921		NDLS_2GDK70704_GT001_STN_41_A1_04.JPG	7.85	1.32
04/07/2018	10:15:08	NDLS01	50.66041	-1.59033	41	4922		NDLS_2GDK70704_GT001_STN_41_A1_05.JPG	8.39	1.07
04/07/2018	10:15:29	NDLS01	50.66049	-1.59026	41	4923		NDLS_2GDK70704_GT001_STN_41_A1_06.JPG	7.42	0.83
04/07/2018	10:15:54	NDLS01	50.66058	-1.59019	41	4924		NDLS_2GDK70704_GT001_STN_41_A1_07.JPG	7.72	1.03

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	10:16:09	NDLS01	50.66064	-1.59015	41	4925		NDLS_2GDK70704_GT001_STN_41_A1_08.JPG	7.06	0.94
04/07/2018	10:16:30	NDLS01	50.66072	-1.59012	41	4926		NDLS_2GDK70704_GT001_STN_41_A1_09.JPG	7.17	0.76
04/07/2018	10:16:49	NDLS01	50.66078	-1.59009	41	4927		NDLS_2GDK70704_GT001_STN_41_A1_10.JPG	6.48	0.66
04/07/2018	10:17:10	NDLS01	50.66083	-1.59005	41	4928		NDLS_2GDK70704_GT001_STN_41_A1_11.JPG	6.67	0.57
04/07/2018	10:17:27	NDLS01	50.66087	-1.59003	41	4929		NDLS_2GDK70704_GT001_STN_41_A1_12.JPG	9.05	0.57
04/07/2018	10:17:47	NDLS01	50.66092	-1.59000	41	4930	EoL	NDLS_2GDK70704_GT001_STN_41_A1_13.JPG	7.34	0.56
04/07/2018	10:22:08	NDLS03	50.66030	-1.58852	42	4931	SoL	NDLS_2GDK70704_GT003_STN_42_A1_01.JPG	8.12	1.40
04/07/2018	10:22:29	NDLS03	50.66039	-1.58844	42	4932		NDLS_2GDK70704_GT003_STN_42_A1_02.JPG	7.08	1.03
04/07/2018	10:22:49	NDLS03	50.66047	-1.58834	42	4933		NDLS_2GDK70704_GT003_STN_42_A1_03.JPG	7.44	1.26
04/07/2018	10:23:11	NDLS03	50.66057	-1.58823	42	4934		NDLS_2GDK70704_GT003_STN_42_A1_04.JPG	8.31	1.04
04/07/2018	10:23:38	NDLS03	50.66065	-1.58816	42	4935		NDLS_2GDK70704_GT003_STN_42_A1_05.JPG	6.94	0.74
04/07/2018	10:24:24	NDLS03	50.66085	-1.58796	42	4936		NDLS_2GDK70704_GT003_STN_42_A1_06.JPG	7.51	1.02
04/07/2018	10:24:55	NDLS03	50.66095	-1.58785	42	4937		NDLS_2GDK70704_GT003_STN_42_A1_07.JPG	6.18	0.74
04/07/2018	10:25:21	NDLS03	50.66101	-1.58779	42	4938		NDLS_2GDK70704_GT003_STN_42_A1_08.JPG	6.47	0.59
04/07/2018	10:25:52	NDLS03	50.66108	-1.58772	42	4939		NDLS_2GDK70704_GT003_STN_42_A1_09.JPG	5.93	0.50
04/07/2018	10:26:23	NDLS03	50.66113	-1.58765	42	4940		NDLS_2GDK70704_GT003_STN_42_A1_10.JPG	6.36	0.45
04/07/2018	10:26:56	NDLS03	50.66120	-1.58760	42	4941		NDLS_2GDK70704_GT003_STN_42_A1_11.JPG	5.57	0.54
04/07/2018	10:27:25	NDLS03	50.66127	-1.58757	42	4942	EoL	NDLS_2GDK70704_GT003_STN_42_A1_12.JPG	5.39	0.52
04/07/2018	10:45:32	NDLS036	50.64516	-1.56833	43	4943	SoL	NDLS_2GDK70704_GT036_STN_43_A1_01.JPG	24.75	0.91
04/07/2018	10:46:04	NDLS036	50.64517	-1.56811	43	4944		NDLS_2GDK70704_GT036_STN_43_A1_02.JPG	24.71	0.87
04/07/2018	10:46:44	NDLS036	50.64520	-1.56789	43	4945		NDLS_2GDK70704_GT036_STN_43_A1_03.JPG	24.79	0.74
04/07/2018	10:47:20	NDLS036	50.64525	-1.56774	43	4946		NDLS_2GDK70704_GT036_STN_43_A1_04.JPG	24.78	0.53
04/07/2018	10:47:59	NDLS036	50.64528	-1.56757	43	4947		NDLS_2GDK70704_GT036_STN_43_A1_05.JPG	24.70	0.62
04/07/2018	10:48:43	NDLS036	50.64530	-1.56735	43	4948		NDLS_2GDK70704_GT036_STN_43_A1_06.JPG	24.63	0.64
04/07/2018	10:49:32	NDLS036	50.64534	-1.56710	43	4949		NDLS_2GDK70704_GT036_STN_43_A1_07.JPG	24.61	0.87
04/07/2018	10:50:03	NDLS036	50.64536	-1.56697	43	4950		NDLS_2GDK70704_GT036_STN_43_A1_08.JPG	24.80	0.66

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04/07/2018	10:50:38	NDLS036	50.64536	-1.56678	43	4951		NDLS_2GDK70704_GT036_STN_43_A1_09.JPG	24.78	0.67
04/07/2018	10:51:04	NDLS036	50.64538	-1.56666	43	4952	EoL	NDLS_2GDK70704_GT036_STN_43_A1_10.JPG	24.77	0.62
04/07/2018	10:58:02	NDLS035	50.64531	-1.55803	44	4953	SoL	NDLS_2GDK70704_GT035_STN_44_A1_01.JPG	23.99	0.85
04/07/2018	10:58:24	NDLS035	50.64535	-1.55790	44	4954		NDLS_2GDK70704_GT035_STN_44_A1_02.JPG	23.94	0.95
04/07/2018	10:58:53	NDLS035	50.64541	-1.55770	44	4955		NDLS_2GDK70704_GT035_STN_44_A1_03.JPG	23.71	1.10
04/07/2018	10:59:24	NDLS035	50.64547	-1.55748	44	4956		NDLS_2GDK70704_GT035_STN_44_A1_04.JPG	23.95	1.08
04/07/2018	10:59:50	NDLS035	50.64552	-1.55731	44	4957		NDLS_2GDK70704_GT035_STN_44_A1_05.JPG	23.73	1.00
04/07/2018	11:00:13	NDLS035	50.64557	-1.55716	44	4958		NDLS_2GDK70704_GT035_STN_44_A1_06.JPG	23.89	0.94
04/07/2018	11:00:37	NDLS035	50.64563	-1.55700	44	4959		NDLS_2GDK70704_GT035_STN_44_A1_07.JPG	24.30	1.08
04/07/2018	11:00:58	NDLS035	50.64568	-1.55684	44	4960		NDLS_2GDK70704_GT035_STN_44_A1_08.JPG	23.69	1.17
04/07/2018	11:01:21	NDLS035	50.64573	-1.55667	44	4961		NDLS_2GDK70704_GT035_STN_44_A1_09.JPG	23.94	1.19
04/07/2018	11:01:40	NDLS035	50.64579	-1.55652	44	4962	EoL	NDLS_2GDK70704_GT035_STN_44_A1_10.JPG	23.62	1.11
04/07/2018	11:08:36	NDLS034	50.64121	-1.55385	45	4963	SoL	NDLS_2GDK70704_GT034_STN_45_A1_01.JPG	25.57	0.92
04/07/2018	11:09:03	NDLS034	50.64127	-1.55368	45	4964		NDLS_2GDK70704_GT034_STN_45_A1_02.JPG	25.51	1.05
04/07/2018	11:09:23	NDLS034	50.64131	-1.55353	45	4965		NDLS_2GDK70704_GT034_STN_45_A1_03.JPG	25.39	1.20
04/07/2018	11:09:43	NDLS034	50.64133	-1.55336	45	4966		NDLS_2GDK70704_GT034_STN_45_A1_04.JPG	25.49	1.12
04/07/2018	11:10:03	NDLS034	50.64137	-1.55322	45	4967		NDLS_2GDK70704_GT034_STN_45_A1_05.JPG	25.25	1.05
04/07/2018	11:10:25	NDLS034	50.64140	-1.55305	45	4968		NDLS_2GDK70704_GT034_STN_45_A1_06.JPG	25.36	1.15
04/07/2018	11:10:46	NDLS034	50.64143	-1.55289	45	4969		NDLS_2GDK70704_GT034_STN_45_A1_07.JPG	25.12	1.11
04/07/2018	11:11:05	NDLS034	50.64146	-1.55275	45	4970		NDLS_2GDK70704_GT034_STN_45_A1_08.JPG	25.32	1.06
04/07/2018	11:11:26	NDLS034	50.64152	-1.55261	45	4971		NDLS_2GDK70704_GT034_STN_45_A1_09.JPG	25.00	1.13
04/07/2018	11:11:47	NDLS034	50.64157	-1.55245	45	4972	EoL	NDLS_2GDK70704_GT034_STN_45_A1_10.JPG	24.99	1.14
04/07/2018	11:20:03	NDLS033	50.64201	-1.54305	46	4973	SoL	NDLS_2GDK70704_GT033_STN_46_A1_01.JPG	23.94	0.42
04/07/2018	11:20:37	NDLS033	50.64204	-1.54292	46	4974		NDLS_2GDK70704_GT033_STN_46_A1_02.JPG	23.90	0.61
04/07/2018	11:21:01	NDLS033	50.64206	-1.54279	46	4975		NDLS_2GDK70704_GT033_STN_46_A1_03.JPG	23.72	0.95
04/07/2018	11:21:21	NDLS033	50.64209	-1.54266	46	4976		NDLS_2GDK70704_GT033_STN_46_A1_04.JPG	23.67	1.00

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	11:21:39	NDLS033	50.64211	-1.54253	46	4977		NDLS_2GDK70704_GT033_STN_46_A1_05.JPG	23.65	1.05
04/07/2018	11:21:58	NDLS033	50.64214	-1.54239	46	4978		NDLS_2GDK70704_GT033_STN_46_A1_06.JPG	23.82	1.01
04/07/2018	11:22:18	NDLS033	50.64215	-1.54223	46	4979		NDLS_2GDK70704_GT033_STN_46_A1_07.JPG	23.80	1.21
04/07/2018	11:22:39	NDLS033	50.64218	-1.54207	46	4980		NDLS_2GDK70704_GT033_STN_46_A1_08.JPG	24.21	1.12
04/07/2018	11:22:59	NDLS033	50.64223	-1.54196	46	4981		NDLS_2GDK70704_GT033_STN_46_A1_09.JPG	23.66	1.06
04/07/2018	11:23:21	NDLS033	50.64226	-1.54179	46	4982	EoL	NDLS_2GDK70704_GT033_STN_46_A1_10.JPG	23.34	1.05
04/07/2018	11:31:24	NDLS032	50.63657	-1.54238	47	4983	SoL	NDLS_2GDK70704_GT032_STN_47_A1_01.JPG	27.64	1.04
04/07/2018	11:31:54	NDLS032	50.63663	-1.54220	47	4984		NDLS_2GDK70704_GT032_STN_47_A1_02.JPG	27.69	1.01
04/07/2018	11:32:23	NDLS032	50.63666	-1.54198	47	4985		NDLS_2GDK70704_GT032_STN_47_A1_03.JPG	27.66	1.07
04/07/2018	11:32:55	NDLS032	50.63670	-1.54174	47	4986		NDLS_2GDK70704_GT032_STN_47_A1_04.JPG	27.87	1.01
04/07/2018	11:33:25	NDLS032	50.63674	-1.54155	47	4987		NDLS_2GDK70704_GT032_STN_47_A1_05.JPG	27.74	1.02
04/07/2018	11:33:52	NDLS032	50.63680	-1.54138	47	4988		NDLS_2GDK70704_GT032_STN_47_A1_06.JPG	27.88	0.97
04/07/2018	11:34:24	NDLS032	50.63685	-1.54119	47	4989		NDLS_2GDK70704_GT032_STN_47_A1_07.JPG	27.57	0.96
04/07/2018	11:34:45	NDLS032	50.63688	-1.54104	47	4990		NDLS_2GDK70704_GT032_STN_47_A1_08.JPG	27.74	0.97
04/07/2018	11:35:12	NDLS032	50.63692	-1.54087	47	4991		NDLS_2GDK70704_GT032_STN_47_A1_09.JPG	27.59	0.92
04/07/2018	11:35:40	NDLS032	50.63696	-1.54069	47	4992	EoL	NDLS_2GDK70704_GT032_STN_47_A1_10.JPG	27.89	1.02
04/07/2018	11:41:55	NDLS031	50.63805	-1.53615	48	4993	SoL	NDLS_2GDK70704_GT031_STN_48_A1_01.JPG	26.26	0.62
04/07/2018	11:42:28	NDLS031	50.63811	-1.53603	48	4995		NDLS_2GDK70704_GT031_STN_48_A1_02.JPG	26.01	0.61
04/07/2018	11:42:56	NDLS031	50.63813	-1.53588	48	4996		NDLS_2GDK70704_GT031_STN_48_A1_03.JPG	25.75	0.90
04/07/2018	11:43:18	NDLS031	50.63818	-1.53574	48	4997		NDLS_2GDK70704_GT031_STN_48_A1_04.JPG	25.85	0.98
04/07/2018	11:43:46	NDLS031	50.63822	-1.53555	48	4998		NDLS_2GDK70704_GT031_STN_48_A1_05.JPG	24.90	0.88
04/07/2018	11:44:13	NDLS031	50.63826	-1.53539	48	4999		NDLS_2GDK70704_GT031_STN_48_A1_06.JPG	25.14	0.96
04/07/2018	11:44:42	NDLS031	50.63831	-1.53520	48	5000		NDLS_2GDK70704_GT031_STN_48_A1_07.JPG	25.31	0.97
04/07/2018	11:45:09	NDLS031	50.63835	-1.53501	48	5001		NDLS_2GDK70704_GT031_STN_48_A1_08.JPG	26.57	0.99
04/07/2018	11:45:38	NDLS031	50.63840	-1.53482	48	5002		NDLS_2GDK70704_GT031_STN_48_A1_09.JPG	26.99	0.93
04/07/2018	11:46:06	NDLS031	50.63847	-1.53465	48	5003		NDLS_2GDK70704_GT031_STN_48_A1_10.JPG	27.18	1.06

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	11:46:26	NDLS031	50.63851	-1.53453	48	5004	EoL	NDLS_2GDK70704_GT031_STN_48_A1_11.JPG	26.56	0.89
04/07/2018	12:28:03	NDSL20_A2	50.68563	-1.54671	49	5006	SoL	NDLS_2GDK70704_GT020_STN_49_A2_01.JPG	6.02	1.46
04/07/2018	12:28:15	NDSL20_A2	50.68571	-1.54670	49	5007		NDLS_2GDK70704_GT020_STN_49_A2_02.JPG	5.86	1.39
04/07/2018	12:28:26	NDSL20_A2	50.68578	-1.54670	49	5008		NDLS_2GDK70704_GT020_STN_49_A2_03.JPG	5.60	1.38
04/07/2018	12:28:41	NDSL20_A2	50.68588	-1.54668	49	5009		NDLS_2GDK70704_GT020_STN_49_A2_04.JPG	5.37	1.45
04/07/2018	12:28:56	NDSL20_A2	50.68598	-1.54666	49	5010		NDLS_2GDK70704_GT020_STN_49_A2_05.JPG	5.64	1.44
04/07/2018	12:29:13	NDSL20_A2	50.68609	-1.54662	49	5011		NDLS_2GDK70704_GT020_STN_49_A2_06.JPG	5.70	1.41
04/07/2018	12:29:31	NDSL20_A2	50.68620	-1.54658	49	5012		NDLS_2GDK70704_GT020_STN_49_A2_07.JPG	5.30	1.36
04/07/2018	12:29:47	NDSL20_A2	50.68629	-1.54653	49	5013		NDLS_2GDK70704_GT020_STN_49_A2_08.JPG	5.58	1.28
04/07/2018	12:30:06	NDSL20_A2	50.68640	-1.54648	49	5014		NDLS_2GDK70704_GT020_STN_49_A2_09.JPG	5.94	1.18
04/07/2018	12:30:27	NDSL20_A2	50.68650	-1.54643	49	5015		NDLS_2GDK70704_GT020_STN_49_A2_10.JPG	6.38	1.16
04/07/2018	12:30:51	NDSL20_A2	50.68663	-1.54640	49	5016		NDLS_2GDK70704_GT020_STN_49_A2_11.JPG	6.78	1.18
04/07/2018	12:31:09	NDSL20_A2	50.68672	-1.54637	49	5017	EoL	NDLS_2GDK70704_GT020_STN_49_A2_12.JPG	6.60	1.06
04/07/2018	12:38:11	NDSL22_A2	50.69356	-1.54632	50	5018	SoL	NDLS_2GDK70704_GT022_STN_50_A2_01.JPG	11.16	1.30
04/07/2018	12:38:45	NDSL22_A2	50.69377	-1.54620	50	5019		NDLS_2GDK70704_GT022_STN_50_A2_02.JPG	6.65	1.51
04/07/2018	12:38:59	NDSL22_A2	50.69387	-1.54614	50	5020		NDLS_2GDK70704_GT022_STN_50_A2_03.JPG	6.80	1.67
04/07/2018	12:39:11	NDSL22_A2	50.69396	-1.54610	50	5021		NDLS_2GDK70704_GT022_STN_50_A2_04.JPG	7.07	1.68
04/07/2018	12:39:24	NDSL22_A2	50.69406	-1.54605	50	5022		NDLS_2GDK70704_GT022_STN_50_A2_05.JPG	7.35	1.68
04/07/2018	12:39:40	NDSL22_A2	50.69418	-1.54598	50	5023		NDLS_2GDK70704_GT022_STN_50_A2_06.JPG	6.82	1.80
04/07/2018	12:39:55	NDSL22_A2	50.69431	-1.54591	50	5024		NDLS_2GDK70704_GT022_STN_50_A2_07.JPG	7.01	1.88
04/07/2018	12:40:11	NDSL22_A2	50.69442	-1.54584	50	5025		NDLS_2GDK70704_GT022_STN_50_A2_08.JPG	7.88	1.63
04/07/2018	12:40:24	NDSL22_A2	50.69452	-1.54579	50	5026		NDLS_2GDK70704_GT022_STN_50_A2_09.JPG	9.56	1.55
04/07/2018	12:40:38	NDSL22_A2	50.69460	-1.54574	50	5027		NDLS_2GDK70704_GT022_STN_50_A2_10.JPG	10.91	1.46
04/07/2018	12:40:54	NDSL22_A2	50.69470	-1.54569	50	5028		NDLS_2GDK70704_GT022_STN_50_A2_11.JPG	10.76	1.39
04/07/2018	12:41:13	NDSL22_A2	50.69481	-1.54562	50	5029	EoL	NDLS_2GDK70704_GT022_STN_50_A2_12.JPG	10.29	1.36
04/07/2018	12:47:59	NDLS24_A2	50.69372	-1.54028	51	5030	SoL	NDLS_2GDK70704_GT024_STN_51_A2_01.JPG	5.71	1.31

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	12:48:21	NDLS24_A2	50.69384	-1.54031	51	5031		NDLS_2GDK70704_GT024_STN_51_A2_02.JPG	5.58	1.18
04/07/2018	12:48:42	NDLS24_A2	50.69395	-1.54031	51	5032		NDLS_2GDK70704_GT024_STN_51_A2_03.JPG	5.16	1.20
04/07/2018	12:49:01	NDLS24_A2	50.69406	-1.54029	51	5033		NDLS_2GDK70704_GT024_STN_51_A2_04.JPG	5.11	1.26
04/07/2018	12:49:22	NDLS24_A2	50.69418	-1.54025	51	5034		NDLS_2GDK70704_GT024_STN_51_A2_05.JPG	4.90	1.35
04/07/2018	12:49:41	NDLS24_A2	50.69430	-1.54020	51	5035		NDLS_2GDK70704_GT024_STN_51_A2_06.JPG	5.15	1.42
04/07/2018	12:50:01	NDLS24_A2	50.69443	-1.54013	51	5036		NDLS_2GDK70704_GT024_STN_51_A2_07.JPG	5.02	1.48
04/07/2018	12:50:20	NDLS24_A2	50.69455	-1.54003	51	5037		NDLS_2GDK70704_GT024_STN_51_A2_08.JPG	3.55	1.45
04/07/2018	12:50:41	NDLS24_A2	50.69466	-1.53993	51	5038		NDLS_2GDK70704_GT024_STN_51_A2_09.JPG	3.58	1.45
04/07/2018	12:50:57	NDLS24_A2	50.69476	-1.53987	51	5039		NDLS_2GDK70704_GT024_STN_51_A2_10.JPG	3.67	1.53
04/07/2018	12:51:12	NDLS24_A2	50.69486	-1.53981	51	5040	EoL	NDLS_2GDK70704_GT024_STN_51_A2_11.JPG	3.68	1.44
04/07/2018	12:56:03	NDLS25_A3	50.69489	-1.54185	52	5041	SoL	NDLS_2GDK70704_GT025_STN_52_A3_01.JPG	2.37	0.80
04/07/2018	12:56:19	NDLS25_A3	50.69495	-1.54181	52	5042		NDLS_2GDK70704_GT025_STN_52_A3_02.JPG	5.12	0.85
04/07/2018	12:56:42	NDLS25_A3	50.69504	-1.54174	52	5043		NDLS_2GDK70704_GT025_STN_52_A3_03.JPG	4.10	1.00
04/07/2018	12:57:00	NDLS25_A3	50.69513	-1.54167	52	5044		NDLS_2GDK70704_GT025_STN_52_A3_04.JPG	4.00	1.23
04/07/2018	12:57:17	NDLS25_A3	50.69523	-1.54161	52	5045		NDLS_2GDK70704_GT025_STN_52_A3_05.JPG	3.74	1.47
04/07/2018	12:57:37	NDLS25_A3	50.69536	-1.54154	52	5046		NDLS_2GDK70704_GT025_STN_52_A3_06.JPG	4.18	1.47
04/07/2018	12:57:57	NDLS25_A3	50.69548	-1.54147	52	5047		NDLS_2GDK70704_GT025_STN_52_A3_07.JPG	4.21	1.36
04/07/2018	12:58:15	NDLS25_A3	50.69559	-1.54142	52	5048		NDLS_2GDK70704_GT025_STN_52_A3_08.JPG	4.40	1.34
04/07/2018	12:58:34	NDLS25_A3	50.69570	-1.54136	52	5049		NDLS_2GDK70704_GT025_STN_52_A3_09.JPG	4.90	1.34
04/07/2018	12:58:49	NDLS25_A3	50.69579	-1.54132	52	5050	EoL	NDLS_2GDK70704_GT025_STN_52_A3_10.JPG	5.23	1.31
04/07/2018	13:36:01	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74468	-1.40108		5051	SoL	SOL_WFD_SAB_18I_0244_084041.JPG	20.68	0.62
04/07/2018	13:36:11	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40104		5052		SOL_WFD_SAB_18I_0245_084050.JPG	20.70	0.62
04/07/2018	13:36:22	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40101		5053		SOL_WFD_SAB_18I_0246_084101.JPG	20.68	0.50

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Fix Description	Still Label	Water depth (m)	SOG (kts)
04/07/2018	13:36:33	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40097		5054		SOL_WFD_SAB_18I_0247_084113.JPG	20.66	0.54
04/07/2018	13:36:45	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40094		5055		SOL_WFD_SAB_18I_0248_084125.JPG	20.77	0.38
04/07/2018	13:37:00	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40089		5056		SOL_WFD_SAB_18I_0249_084139.JPG	20.62	0.38
04/07/2018	13:37:13	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40085		5057		SOL_WFD_SAB_18I_0250_084152.JPG	20.63	0.40
04/07/2018	13:37:27	EA_SOL_WFD_18I - Sabellaria sp. investigation	50.74469	-1.40081		5058	EoL	SOL_WFD_SAB_18I_0251_084206.JPG	20.55	0.48

7.7 Grab Survey Metadata

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
Sampling gear = Mini-Hamon grab, sieve mesh= 1mm									
05/07/2018	08:46	SOWM31_SIFCA	50.63820	-1.53569	53	5059	24.43	1.6	PSA only
05/07/2018	09:02	SOWM32_SIFCA_A1	50.63677	-1.54141	54	5060	27.03	-	Discarded
05/07/2018	09:05	SOWM32_SIFCA_A2	50.63672	-1.54169	54	5061	26.97	7.2	PSA only
05/07/2018	09:15	SOWM33_SIFCA	50.64208	-1.54241	55	5062	22.94	7.2	PSA only
05/07/2018	09:23	SOWM34_SIFCA	50.64143	-1.55284	56	5063	24.37	7.2	PSA only
05/07/2018	09:31	SOWM35_SIFCA	50.64552	-1.55720	57	5064	23.26	8.8	PSA only
05/07/2018	09:41	SOWM36_SIFCA	50.64532	-1.56736	58	5065	24.48	8.0	PSA only
05/07/2018	09:59	NDLS101_A1	50.65777	-1.61263	59	5066	17.39	6.4	Discarded
05/07/2018	10:02	NDLS101_A2	50.65782	-1.61315	59	5067	16.94	7.2	Biota & PSA
05/07/2018	10:10	NDLS066_A1	50.65890	-1.60647	60	5068	19.34	0.8	Discarded
05/07/2018	10:13	NDLS066_A2	50.65887	-1.60658	60	5069	19.33	0.8	Discarded
05/07/2018	10:16	NDLS066_A3	50.65890	-1.60652	60	5070	19.29	1.2	PSA only
05/07/2018	10:30	NDLS07	50.66273	-1.60444	61	5071	18.18	-	Discarded
05/07/2018	10:34	NDLS07	50.66261	-1.60459	61	5072	18.20	-	Discarded
05/07/2018	10:41	NDLS097_A1	50.66278	-1.59728	62	5073	15.55	-	Discarded
05/07/2018	10:46	NDLS097_A2	50.66285	-1.59732	62	5074	15.46	-	Discarded
05/07/2018	10:50	NDLS097_A3	50.66271	-1.59731	62	5075	15.56	-	Discarded
05/07/2018	10:58	NDLS099_A1	50.66528	-1.59395	63	5076	18.90	-	Discarded
05/07/2018	11:01	NDLS099_A2	50.66546	-1.59404	63	5077	19.05	-	Discarded
05/07/2018	11:05	NDLS099_A3	50.66530	-1.59415	63	5078	19.04	-	Discarded
05/07/2018	11:18	NDLS065_A1	50.66693	-1.59757	64	5079	26.71	4.8	PSA only
05/07/2018	11:23	NDLS065_A2	50.66697	-1.59764	64	5080	25.94	-	Discarded
05/07/2018	11:29	NDLS065_A3	50.66703	-1.59738	64	5081	25.87	-	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
05/07/2018	11:44	NDLS064_A1	50.66732	-1.58823	65	5082	17.00	-	Discarded
05/07/2018	11:47	NDLS064_A2	50.66741	-1.58828	65	5083	21.05	-	Discarded
05/07/2018	11:51	NDLS064_A3	50.66729	-1.58829	65	5084	20.62	-	Discarded
05/07/2018	12:37	NDLS096_A1	50.66689	-1.58283	66	5085	14.14	-	Discarded
05/07/2018	12:39	NDLS096_A2	50.66692	-1.58273	66	5086	13.00	0.8	Discarded
05/07/2018	12:42	NDLS096_A3	50.66690	-1.58272	66	5087	14.29	-	Discarded
05/07/2018	12:51	NDLS098_A1	50.66502	-1.57750	67	5088	8.86	-	Discarded
05/07/2018	12:55	NDLS098_A2	50.66509	-1.57731	67	5089	8.74	-	Discarded
05/07/2018	12:57	NDLS098_A3	50.66506	-1.57739	67	5090	8.64	1.6	PSA only
05/07/2018	13:06	NDLS100_A1	50.66631	-1.57240	68	5091	7.89	-	Discarded
05/07/2018	13:08	NDLS100_A2	50.66632	-1.57238	68	5092	7.50	1.6	PSA only
05/07/2018	13:10	NDLS100_A3	50.66627	-1.57231	68	5093	7.72	-	Discarded
05/07/2018	13:19	NDLS095	50.66860	-1.57685	69	5094	9.98	4.8	Biota & PSA
05/07/2018	13:28	NDLS061_A1	50.67101	-1.58100	70	5095	14.80	-	Discarded
05/07/2018	13:23	NDLS061_A2	50.67097	-1.58103	70	5096	14.99	1.6	PSA only
05/07/2018	13:34	NDLS061_A3	50.67101	-1.58108	70	5097	14.98	-	Discarded
05/07/2018	13:39	NDLS077_A1	50.67266	-1.58110	71	5098	12.76	-	Discarded
05/07/2018	13:43	NDLS077_A2	50.67268	-1.58109	71	5099	12.72	-	Discarded
05/07/2018	13:45	NDLS077_A3	50.67264	-1.58110	71	5100	13.06	-	Discarded
05/07/2018	13:52	NDLS048_A1	50.67492	-1.57875	72	5101	16.60	-	Discarded
05/07/2018	13:55	NDLS048_A2	50.67492	-1.57873	72	5102	16.75	6.4	Biota & PSA
05/07/2018	14:05	NDLS060_A1	50.67717	-1.57300	73	5103	23.78	8.0	Biota & PSA
06/07/2018	08:12	NDLS_071_A1	50.66560	-1.60197	74	5104	27.39	5.6	Biota & PSA
06/07/2018	08:20	NDLS_070_A1	50.66739	-1.60364	75	5105	16.90	-	Discarded
06/07/2018	08:22	NDLS_070_A2	50.66735	-1.60356	75	5106	17.19	-	Discarded
06/07/2018	08:25	NDLS_070_A1	50.66739	-1.60359	75	5107	16.88	4.0	Biota & PSA

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
06/07/2018	08:30	NDLS_072_A1	50.66926	-1.60034	76	5108	13.83	-	Discarded
06/07/2018	08:33	NDLS_072_A2	50.66924	-1.60055	76	5109	13.70	-	Discarded
06/07/2018	08:36	NDLS_072_A3	50.66926	-1.60039	76	5110	13.82	-	Misfire
06/07/2018	08:39	NDLS_072_A4	50.66928	-1.60044	76	5111	13.46	4.0	Biota & PSA
06/07/2018	08:43	NDLS_067_A1	50.67029	-1.59649	77	5112	13.94	-	Discarded
06/07/2018	08:47	NDLS_067_A2	50.67033	-1.59657	77	5113	13.65	-	Discarded
06/07/2018	08:49	NDLS_067_A3	50.67036	-1.59654	77	5114	13.69	-	Discarded
06/07/2018	08:56	NDLS_068_A1	50.67047	-1.58831	78	5115	17.32	-	Discarded
06/07/2018	08:58	NDLS_068_A2	50.67040	-1.58834	78	5116	19.28	1.6	PSA only
06/07/2018	09:00	NDLS_068_A3	50.67046	-1.58843	78	5117	19.19	-	Discarded
06/07/2018	09:06	NDLS_091_A1	50.67415	-1.59200	79	5118	17.25	5.6	Biota & PSA
06/07/2018	09:11	NDLS_089_A1	50.67527	-1.59103	80	5119	17.48	-	Discarded
06/07/2018	09:14	NDLS_089_A2	50.67527	-1.59104	80	5120	17.95	-	Discarded
06/07/2018	09:16	NDLS_089_A3	50.67532	-1.59086	80	5121	17.67	-	Discarded
06/07/2018	09:45	NDLS_062_A1	50.67574	-1.58823	81	5122	20.61	-	Discarded
06/07/2018	09:48	NDLS_062_A2	50.67576	-1.58834	81	5123	20.28	4.0	Biota & PSA
06/07/2018	09:51	NDLS_062_A3	50.67570	-1.58833	81	5124	19.85	-	Misfire
06/07/2018	09:53	NDLS_062_A4	50.67563	-1.58830	81	5125	19.75	-	Discarded
06/07/2018	09:58	NDLS_063_A1	50.67743	-1.58913	82	5126	18.10	2.4	PSA only
06/07/2018	10:00	NDLS_063_A2	50.67742	-1.58936	82	5127	18.12	-	Discarded
06/07/2018	10:02	NDLS_063_A3	50.67743	-1.58923	82	5128	18.38	-	Discarded
06/07/2018	10:09	NDLS_088_A1	50.67889	-1.58236	83	5129	26.12	6.0	Biota & PSA
06/07/2018	10:15	NDLS_087_A1	50.68172	-1.58242	84	5130	21.93	-	Discarded
06/07/2018	10:18	NDLS_087_A2	50.68172	-1.58248	84	5131	21.66	6.4	Biota & PSA
06/07/2018	10:25	NDLS_086_A1	50.68257	-1.57852	85	5132	28.74	5.2	Biota & PSA
06/07/2018	10:33	NDLS_049_A1	50.67868	-1.57532	86	5133	20.01	4.5	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
06/07/2018	10:37	NDLS_049_A2	50.67864	-1.57523	86	5134	19.95	7.2	Biota & PSA
06/07/2018	10:43	NDLS_075_A1	50.67985	-1.57324	87	5135	19.46	5.6	Biota & PSA
06/07/2018	11:42	NDLS_078_A1	50.67759	-1.56796	88	5136	13.74	-	Discarded
06/07/2018	11:45	NDLS_078_A2	50.67753	-1.56799	88	5137	13.59	4.0	Biota & PSA
06/07/2018	11:48	NDLS_078_A3	50.67765	-1.56799	88	5138	13.91	-	Discarded
06/07/2018	11:54	NDLS_054_A1	50.67862	-1.56943	89	5139	23.78	8.8	Biota & PSA
06/07/2018	12:01	NDLS_046_A1	50.67965	-1.56899	90	5140	22.47	-	Discarded
06/07/2018	12:05	NDLS_046_A2	50.67967	-1.56913	90	5141	22.57	-	Discarded
06/07/2018	12:07	NDLS_046_A3	50.67974	-1.56910	90	5142	22.60	6.4	Biota & PSA
06/07/2018	12:18	NDLS_076_A1	50.68015	-1.56564	91	5143	18.40	-	Discarded
06/07/2018	12:21	NDLS_076_A2	50.68017	-1.56560	91	5144	18.47	-	Discarded
06/07/2018	12:26	NDLS_076_A3	50.68018	-1.56560	91	5145	18.51	4.0	Biota & PSA
06/07/2018	12:31	NDLS_069_A1	50.68211	-1.56569	92	5146	18.97	5.6	Biota & PSA
06/07/2018	12:37	NDLS_045_A1	50.68357	-1.56746	93	5147	14.55	-	Discarded
06/07/2018	12:39	NDLS_045_A2	50.68354	-1.56757	93	5148	14.52	4.0	Biota & PSA
06/07/2018	12:42	NDLS_045_A3	50.68355	-1.56760	93	5149	14.34	-	Discarded
06/07/2018	13:23	NDLS_050_A1	50.68256	-1.57143	94	5150	20.79	-	Discarded
06/07/2018	13:25	NDLS_050_A2	50.68246	-1.57148	94	5151	20.97	1.6	PSA only
06/07/2018	13:28	NDLS_050_A3	50.68253	-1.57155	94	5152	21.59	-	Discarded
06/07/2018	13:35	NDLS_085_A1	50.68637	-1.57531	95	5153	24.61	-	Discarded
06/07/2018	13:39	NDLS_085_A2	50.68633	-1.57504	95	5154	25.21	5.2	Biota & PSA
06/07/2018	13:47	NDLS_084_A1	50.68850	-1.56907	96	5155	38.82	-	Discarded
06/07/2018	13:53	NDLS_084_A2	50.68836	-1.56964	96	5156	36.13	-	Discarded
06/07/2018	13:58	NDLS_084_A3	50.68840	-1.56944	96	5157	36.42	3.2	Biota & PSA
06/07/2018	14:05	NDLS_082_A1	50.69127	-1.56723	97	5158	30.06	-	Discarded
06/07/2018	14:10	NDLS_082_A2	50.69130	-1.56712	97	5159	29.60	-	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
06/07/2018	14:14	NDLS_082_A3	50.69139	-1.56744	97	5160	28.46	6.0	Biota & PSA
06/07/2018	14:23	NDLS_081_A1	50.69310	-1.55843	98	5161	39.29	-	Discarded
06/07/2018	14:26	NDLS_081_A2	50.69307	-1.55847	98	5162	39.13	1.6	PSA only
06/07/2018	14:30	NDLS_081_A3	50.69316	-1.55819	98	5163	38.90	-	Discarded
10/07/2018	07:50	NDLS_037	50.69106	-1.53967	99	5172	3.05	-	Discarded
10/07/2018	07:56	NDLS_037	50.69107	-1.53967	99	5173	3.18	5.2	Biota & PSA
10/07/2018	07:59	NDLS_037	50.69105	-1.53968	99	5174	2.90	-	Discarded
10/07/2018	08:07	NDLS_079	50.69262	-1.54442	100	5175	9.26	-	Discarded
10/07/2018	08:09	NDLS_079	50.69267	-1.54429	100	5177	9.24	1.6	PSA only
10/07/2018	08:12	NDLS_079	50.69259	-1.54425	100	5179	9.80	-	Discarded
10/07/2018	08:20	NDLS_092	50.69586	-1.53939	101	5180	5.54	-	Discarded
10/07/2018	08:22	NDLS_092	50.69580	-1.53933	101	5181	5.91	1.6	PSA only
10/07/2018	08:24	NDLS_092	50.69580	-1.53943	101	5182	5.56	-	Discarded
10/07/2018	08:28	NDLS_059	50.69801	-1.54291	102	5183	9.30	-	Discarded
10/07/2018	08:30	NDLS_059	50.69803	-1.54292	102	5184	9.31	-	Discarded
10/07/2018	08:32	NDLS_059	50.69806	-1.54296	102	5185	9.19	-	Discarded
10/07/2018	08:37	NDLS_058	50.69648	-1.54817	103	5186	17.71	-	Discarded
10/07/2018	08:40	NDLS_058	50.69642	-1.54831	103	5187	17.94	1.6	PSA only
10/07/2018	08:43	NDLS_058	50.69641	-1.54827	103	5188	17.77	-	Discarded
10/07/2018	08:53	NDLS_080	50.69849	-1.55347	104	5189	46.83	-	Discarded
10/07/2018	08:58	NDLS_080	50.69871	-1.55287	104	5190	46.75	-	Discarded
10/07/2018	09:06	NDLS_080	50.69883	-1.55263	104	5191	46.94	-	Misfire
10/07/2018	09:09	NDLS_080	50.69877	-1.55267	104	5192	46.78	-	Discarded
10/07/2018	09:17	NDLS_083	50.69588	-1.55538	105	5193	44.46	1.6	PSA only
10/07/2018	09:22	NDLS_083	50.69585	-1.55543	105	5194	44.09	-	Discarded
10/07/2018	09:29	NDLS_083	50.69566	-1.55543	105	5195	43.57	-	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
10/07/2018	09:38	NDLS_057	50.69391	-1.55197	106	5196	15.87	-	Discarded
10/07/2018	09:40	NDLS_057	50.69406	-1.55213	106	5197	16.90	-	Discarded
10/07/2018	09:43	NDLS_057	50.69406	-1.55208	106	5198	17.31	-	Discarded
10/07/2018	09:51	NDLS_090	50.68866	-1.54890	107	5200	6.51	-	Discarded
10/07/2018	09:53	NDLS_090	50.68864	-1.54889	107	5201	6.43	-	Discarded
10/07/2018	09:55	NDLS_090	50.68866	-1.54872	107	5202	6.53	-	Discarded
10/07/2018	10:00	NDLS_073	50.68768	-1.55299	108	5203	10.95	-	Discarded
10/07/2018	10:05	NDLS_073	50.68761	-1.55310	108	5205	10.03	-	Discarded
10/07/2018	10:11	NDLS_073	50.68763	-1.55303	108	5206	9.94	-	Discarded
10/07/2018	10:43	NDLS_074	50.68965	-1.55445	109	5207	13.91	-	Discarded
10/07/2018	10:45	NDLS_074	50.68958	-1.55450	109	5208	13.89	1.6	PSA only
10/07/2018	10:47	NDLS_074	50.68965	-1.55445	109	5209	14.05	-	Discarded
10/07/2018	10:56	NDLS_055	50.69015	-1.55751	110	5210	10.61	-	Discarded
10/07/2018	10:58	NDLS_055	50.69012	-1.55756	110	5211	10.44	-	Discarded
10/07/2018	11:00	NDLS_055	50.69008	-1.55751	110	5212	10.26	-	Discarded
10/07/2018	11:10	NDLS_047	50.68785	-1.55750	111	5213	14.71	-	Discarded
10/07/2018	11:13	NDLS_047	50.68780	-1.55765	111	5214	14.43	5.6	Biota & PSA
10/07/2018	11:16	NDLS_047	50.68776	-1.55754	111	5215	14.37	-	Discarded
10/07/2018	11:23	NDLS_056	50.68869	-1.56389	112	5216	24.64	-	Discarded
10/07/2018	11:26	NDLS_056	50.68867	-1.56380	112	5217	22.71	3.2	Biota & PSA
10/07/2018	11:28	NDLS_056	50.68861	-1.56388	112	5218	22.56	-	Discarded
10/07/2018	11:34	NDLS_51	50.68398	-1.56036	113	5219	18.93	-	Discarded
10/07/2018	11:39	NDLS_51	50.68392	-1.56020	113	5220	19.29	6.4	Biota & PSA
10/07/2018	11:48	NDLS_52	50.68427	-1.55800	114	5221	19.03	5.6	Biota & PSA
10/07/2018	11:55	NDLS_53	50.68245	-1.55704	115	5222	8.64	-	Discarded
10/07/2018	11:57	NDLS_53	50.68244	-1.55716	115	5223	8.61	-	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
10/07/2018	11:59	NDLS_53	50.68242	-1.55718	115	5224	8.52	5.6	Biota & PSA
10/07/2018	12:07	NDLS_93	50.68067	-1.55471	116	5225	5.24	-	Discarded
10/07/2018	12:08	NDLS_93	50.68074	-1.55459	116	5226	4.60	-	Discarded
10/07/2018	12:10	NDLS_93	50.68066	-1.55466	116	5227	4.79	1.6	PSA only
10/07/2018	12:26	NDLS_94	50.68005	-1.55934	117	5228	6.12	-	Discarded
10/07/2018	12:28	NDLS_94	50.68001	-1.55925	117	5229	6.00	-	Discarded
10/07/2018	12:29	NDLS_94	50.68003	-1.55925	117	5230	5.83	-	Discarded
10/07/2018	13:06	NDLS_42	50.68213	-1.54898	118	5231	3.93	-	Discarded
10/07/2018	13:08	NDLS_42	50.68214	-1.54896	118	5232	3.59	-	Discarded
10/07/2018	13:10	NDLS_42	50.68207	-1.54886	118	5233	3.85	4.0	Biota & PSA
10/07/2018	13:16	NDLS_38	50.68231	-1.54682	119	5234	3.20	4.0	Biota & PSA
10/07/2018	13:17	NDLS_38	50.68222	-1.54684	119	5235	3.37	2.4	Discarded
10/07/2018	13:29	NDLS_43	50.68206	-1.54997	120	5236	4.54	-	Discarded
10/07/2018	13:31	NDLS_43	50.68198	-1.55001	120	5237	4.51	-	Discarded
10/07/2018	13:33	NDLS_43	50.68201	-1.54994	120	5238	4.57	6.0	Biota & PSA
10/07/2018	13:43	NDLS_44	50.68474	-1.55082	121	5239	5.68	-	Discarded
10/07/2018	13:45	NDLS_44	50.68481	-1.55088	121	5240	5.55	-	Discarded
10/07/2018	13:47	NDLS_44	50.68490	-1.55074	121	5241	5.03	4.0	Biota & PSA
12/07/2018	07:55	NDLS 103	50.69961	-1.54134	122	4290	12.71	0.8	Discarded
12/07/2018	07:59	NDLS 103	50.69963	-1.54131	122	4291	12.64	1.6	PSA only
12/07/2018	08:02	NDLS 103	50.69953	-1.54115	122	4292	12.03	-	Discarded
12/07/2018	08:10	NDLS 104	50.69847	-1.54640	123	4293	16.60	-	Misfire
12/07/2018	08:13	NDLS 104	50.69848	-1.54644	123	4294	16.75	3.2	Biota & PSA
12/07/2018	08:18	NDLS 102	50.69716	-1.54504	124	4295	11.14	1.6	Discarded
12/07/2018	08:21	NDLS 102	50.69705	-1.54505	124	4296	11.14	0.8	Discarded
12/07/2018	08:24	NDLS 102	50.69707	-1.54503	124	4297	11.29	-	Misfire

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
12/07/2018	08:27	NDLS 102	50.69710	-1.54506	124	4298	11.31	-	Biota & PSA
12/07/2018	08:37	NDLS 105	50.69522	-1.55033	125	4299	17.82	-	Discarded
12/07/2018	08:41	NDLS 105	50.69525	-1.55025	125	4300	17.60	-	Discarded
12/07/2018	08:43	NDLS 105	50.69511	-1.55028	125	4301	17.51	0.8	PSA only
12/07/2018	08:47	NDLS 105	50.69514	-1.55024	125	4302	17.55	-	Discarded
12/07/2018	08:55	NDLS 107	50.69146	-1.55213	126	4303	12.60	-	Discarded
12/07/2018	08:57	NDLS 107	50.69152	-1.55208	126	4304	12.78	-	Discarded
12/07/2018	08:59	NDLS 107	50.69149	-1.55209	126	4305	12.73	-	Discarded
12/07/2018	09:02	NDLS 107	50.69165	-1.55212	126	4306	13.12	-	Discarded
12/07/2018	09:05	NDLS 106	50.69273	-1.55620	127	4307	12.94	-	Discarded
12/07/2018	09:07	NDLS 106	50.69273	-1.55609	127	4308	13.00	-	Discarded
12/07/2018	09:09	NDLS 106	50.69278	-1.55611	127	4309	12.99	-	Discarded
12/07/2018	09:15	NDLS 108	50.68988	-1.56119	128	4310	23.34	2.4	PSA only
12/07/2018	09:22	NDLS 108	50.69005	-1.56099	128	4311	24.23	-	Discarded
12/07/2018	09:24	NDLS 108	50.68986	-1.56104	128	4312	22.56	-	Discarded
12/07/2018	09:31	NDLS 125	50.68795	-1.56375	129	4313	21.38	3.2	Biota & PSA
12/07/2018	09:34	NDLS 125	50.68793	-1.56380	129	4314	21.17	-	Discarded
12/07/2018	09:38	NDLS 126	50.68683	-1.55985	130	4315	14.57	-	Discarded
12/07/2018	09:42	NDLS 126	50.68692	-1.55971	130	4316	14.55	2.4	Biota & PSA
12/07/2018	09:50	NDLS 111	50.68639	-1.55430	131	4317	8.02	-	Discarded
12/07/2018	09:52	NDLS 111	50.68617	-1.55450	131	4318	1.71	0.4	PSA only
12/07/2018	09:53	NDLS 111	50.68630	-1.55437	131	4319	8.77	-	Discarded
12/07/2018	10:00	NDLS 109	50.68663	-1.56773	132	4320	24.28	-	Discarded
12/07/2018	10:04	NDLS 109	50.68648	-1.56761	132	4321	22.03	2.4	PSA only
12/07/2018	10:07	NDLS 109	50.68642	-1.56784	132	4322	23.87	-	Discarded
12/07/2018	10:14	NDLS 110	50.68569	-1.56431	133	4323	14.17	6.4	Biota & PSA

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
12/07/2018	10:22	NDLS 112	50.68274	-1.56269	134	4324	18.33	4.8	Biota & PSA
12/07/2018	10:29	NDLS 113	50.68164	-1.56906	135	4325	18.81	3.2	Biota & PSA
12/07/2018	10:38	NDLS 114	50.68120	-1.57632	136	4326	29.56	-	Discarded
12/07/2018	10:41	NDLS 114	50.68119	-1.57637	136	4327	29.66	6.4	Biota & PSA
12/07/2018	11:28	NDLS 124	50.67732	-1.57665	137	4328	19.60	11.2	Biota & PSA
12/07/2018	11:37	NDLS 117	50.67619	-1.58297	138	4329	20.31	-	Discarded
12/07/2018	11:41	NDLS 117	50.67623	-1.58293	138	4330	20.38	-	Discarded
12/07/2018	11:44	NDLS 117	50.67622	-1.58298	138	4331	20.29	-	Misfire
12/07/2018	11:48	NDLS 117	50.67621	-1.58305	138	4332	20.26	-	Discarded
12/07/2018	11:53	NDLS 115	50.67507	-1.57512	139	4333	21.40	-	Discarded
12/07/2018	11:56	NDLS 115	50.67506	-1.57460	139	4334	22.13	9.6	Biota & PSA
12/07/2018	12:06	NDLS 119	50.67235	-1.57722	140	4335	14.67	3.2	Biota & PSA
12/07/2018	12:47	NDLS 116	50.67316	-1.58635	141	4336	15.15	-	Misfire
12/07/2018	12:50	NDLS 116	50.67322	-1.58627	141	4336	14.97	-	Discarded
12/07/2018	12:53	NDLS 116	50.67314	-1.58635	141	4337	14.95	-	Discarded
12/07/2018	11:57	NDLS 116	50.67316	-1.58640	141	4338	15.01	-	Discarded
12/07/2018	13:02	NDLS 120	50.66978	-1.58201	142	4339	18.89	-	Misfire
12/07/2018	13:04	NDLS 120	50.66979	-1.58179	142	4340	18.44	-	Misfire
12/07/2018	13:07	NDLS 120	50.66975	-1.58189	142	4341	18.74	3.7	Biota & PSA
12/07/2018	13:14	NDLS 123	50.67051	-1.59413	143	4342	15.28	-	Discarded
12/07/2018	13:17	NDLS 123	50.67045	-1.59420	143	4343	14.99	1.6	PSA only
12/07/2018	13:20	NDLS 123	50.67050	-1.59416	143	4344	14.97	-	Discarded
12/07/2018	13:25	NDLS 118	50.66835	-1.59269	144	4345	21.50	-	Discarded
12/07/2018	13:27	NDLS 118	50.66828	-1.59246	144	4346	22.33	-	Misfire
12/07/2018	13:29	NDLS 118	50.66834	-1.59254	144	4347	21.81	-	Discarded
12/07/2018	13:32	NDLS 118	50.66829	-1.59262	144	4348	21.61	-	Misfire

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
12/07/2018	13:36	NDLS 118	50.66828	-1.59258	144	4349	21.92	1.6	PSA only
12/07/2018	13:45	NDLS 122	50.66527	-1.60714	145	4350	18.56	-	Misfire
12/07/2018	13:48	NDLS 122	50.66523	-1.60668	145	4351	18.81	0.8	PSA only
12/07/2018	13:51	NDLS 122	50.66531	-1.60701	145	4352	18.35	-	Discarded
12/07/2018	13:54	NDLS 122	50.66532	-1.60672	145	4353	18.26	-	Misfire
12/07/2018	13:56	NDLS 122	50.66529	-1.60680	145	4354	18.43	-	Discarded
Sampling gear = Day grab									
05/11/2018	09:24	NDLS37C	50.69110	-1.53966	146	4491	3.41	5.0	PSA & Contaminants
05/11/2018	09:30	NDLS37C	50.69112	-1.53963	146	4492	3.49	-	Contaminants
05/11/2018	09:50	NDLS 51C	50.68388	-1.56023	147	4494	20.96	-	Discarded
05/11/2018	09:55	NDLS 51C	50.68396	-1.56041	147	4495	20.27	-	Discarded
05/11/2018	10:05	NDLS 51C	50.68399	-1.56010	147	4496	20.67	-	Discarded
05/11/2018	10:13	NDLS 76C	50.68016	-1.56574	148	4497	19.38	-	Discarded
05/11/2018	10:17	NDLS 76C	50.68013	-1.56569	148	4498	19.24	-	Discarded
05/11/2018	10:23	NDLS 76C	50.68020	-1.56540	148	4499	18.23	-	Discarded
05/11/2018	10:32	NDLS 54C	50.67853	-1.56951	149	4500	24.98	-	Discarded
05/11/2018	10:37	NDLS 54C	50.67870	-1.56934	149	4501	24.77	-	Discarded
05/11/2018	10:43	NDLS 54C	50.67851	-1.56927	149	4502	24.76	-	Discarded
05/11/2018	10:55	NDLS 49C	50.67865	-1.57518	150	4503	20.99	-	Discarded
05/11/2018	11:02	NDLS 49C	50.67846	-1.57543	150	4504	20.85	-	Discarded
05/11/2018	11:05	NDLS 49C	50.67879	-1.57506	150	4505	21.66	-	Discarded
05/11/2018	11:15	NDLS 61C	50.67091	-1.58108	151	4506	15.68	-	Discarded
05/11/2018	11:18	NDLS 61C	50.67099	-1.58104	151	4507	15.74	-	Misfire
05/11/2018	11:21	NDLS 61C	50.67097	-1.58112	151	4508	15.50	-	Discarded
05/11/2018	11:24	NDLS 61C	50.67100	-1.58093	151	4509	15.58	-	Misfire
05/11/2018	11:28	NDLS 61C	50.67093	-1.58076	151	4510	15.58	-	Discarded

Date	Time UTC	Station Code	WGS84 Latitude DD.DDDDD	WGS84 Longitude DD.DDDDD	STN no.	Hpro fix no.	Water depth (m)	Sediment volume (Litres)	Sediment use
05/11/2018	11:46	NDLS 95C	50.67023	-1.58016	152	4511	16.42	-	Not attempted due to fishing gear
05/11/2018	11:57	NDLS 86C	50.68238	-1.57875	153	4512	30.97	-	Discarded
05/11/2018	12:02	NDLS 86C	50.68204	-1.57898	153	4513	31.10	-	Abandoned due to strong current
05/11/2018	12:13	NDLS 93C	50.68075	-1.55466	154	4514	5.82	-	Discarded
05/11/2018	12:15	NDLS 93C	50.68048	-1.55478	154	4515	5.50	-	Discarded
05/11/2018	12:18	NDLS 93C	50.68061	-1.55444	154	4516	4.93	-	Misfire
05/11/2018	12:19	NDLS 93C	50.68060	-1.55454	154	4517	5.23	-	Discarded
05/11/2018	12:26	NDLS 43C	50.68206	-1.55006	155	4518	5.60	6.5	PSA & Contaminants
05/11/2018	12:35	NDLS 43C	50.68204	-1.54995	155	4519	5.40	-	Contaminants
05/11/2018	12:56	NDLS 92C	50.69587	-1.53948	156	4521	5.03	-	Discarded
05/11/2018	13:07	NDLS 102C	50.69703	-1.54513	157	4522	10.54	-	Discarded
05/11/2018	13:10	NDLS 102C	50.69712	-1.54521	157	4523	10.54	-	Discarded
05/11/2018	13:13	NDLS 102C	50.69706	-1.54450	157	4524	7.62	-	Discarded due to stones and also distance from site
05/11/2018	13:17	NDLS 102C	50.69707	-1.54499	157	4525	10.32	-	Discarded
05/11/2018	13:53	NDLS 44C	50.68491	-1.55068	158	4526	5.21	-	Discarded
05/11/2018	13:57	NDLS 44C	50.68505	-1.55072	158	4527	5.16	-	Misfire
05/11/2018	13:58	NDLS 44C	50.68512	-1.55060	158	4528	5.20	-	Discarded
05/11/2018	14:00	NDLS 44C	50.68501	-1.55062	158	4529	4.94	-	Discarded
05/11/2018	14:05	NDLS 38C	50.68241	-1.54683	159	4530	3.49	5.5	PSA & Contaminants
05/11/2018	14:11	NDLS 38C	50.68241	-1.54675	159	4531	3.32	-	Contaminants

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