



**ExxonMobil Canada Ltd.
2019 Eastern Newfoundland Offshore
Exploration Drilling Project –
EL1134 and EL 1135**

Coral and Sponge Survey Results

Submitted by:

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EXECUTIVE SUMMARY

ExxonMobil Canada Ltd. (EMCL) is proposing to conduct an offshore exploration drilling program within offshore Exploration Licences (EL) located in the Flemish Pass, commencing August 2019. In preparation for regulatory approval, a survey to evaluate the presence and distribution of corals and sponges was undertaken. A seabed video survey was completed at both the Hampden well location (EL 1134) and the Harp well location (EL 1135). Project activities included the utilization of a Remotely-Operated Vehicle (ROV) with the assistance of Marine Biologists to identify cold water coral (CWC) and sponges within the areas. At both well locations, ROV data was acquired at the drill center and at the modelled cuttings dispersal area. Because the Harp drill site is located in shallow water and the rig will be moored, a survey along the lengths of the anchor pre-lays was also conducted in July 2019. For Hampden (EL 1134), the rig will keep station using dynamic positioning (DP), so an anchor survey is not required.

All benthic invertebrate species were mapped to assess the spatial distribution and compared to the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) good practice guidance, which references the *National Advisory Panel on Marine Protected Area Standards* and states that a 'coral aggregation' is defined as either a *Lophelia Pertusa* reef complex or five or more corals larger than 30 centimeters (cm) in height or width within a 100 m² area. The benthic megafaunal community at both Hampden (EL 1134) and Harp (EL 1135) were comprised of cold-water soft corals, sea pens, sponges, sea anemones and hydrozoans. Sea pens appeared to be the dominant coral group at Hampden (EL 1134) and sea anemones the dominant species at Harp (EL 1135).

Based upon the observations, during initial survey activities at the drill site for the Hampden well location (EL 1134), there are two CWC 'aggregations' located within the 200 m x 200 m drill center which meet the C-NLOPB coral good practice and could be physically impacted during exploration drilling operations. However, with proper mitigations established, there will be no lasting effects to any identified CWC aggregations. Based upon observations of CWCs in the Harp well location (EL 1135), there will be no impact to any CWC 'aggregations' during the 2019 exploration drilling activities.

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LIST OF ACRONYMS

ADW	Approval to Drill a Well
BOP	Blow-Out Preventer
C-NLOPB	Canada-Newfoundland and Labrador Offshore Petroleum Board
cm	Centimeters
CWC	Cold Water Coral
DP	Dynamic Positioning
EA	Environmental Assessment
E&R	Environment and Regulatory
EBS	Environmental Baseline Survey
EIS	Environmental Impact Statement
EL	Exploration Licence
EMDC	ExxonMobil Development Company
DFO	Department of Fisheries and Oceans
GeOps	Geophysical Operations
km	Kilometre
m	Metre
mm	Millimetre
mERA	Marine Environmental Risk Assessment
MODU	Mobile Offshore Drilling Unit
OWTG	Offshore Waste Treatment Guidelines
PNET	Potential No Effect Threshold
ROV	Remotely Operated Vehicle
SSH&E	Safety, Security, Health and Environment
SBM	Synthetic Based Mud
SPA	Southern Project Area
SBRA	Scenario-Based Risk Assessment
TVDss	True Vertical Depth sub-sea
WBM	Water Based Mud

1.0 INTRODUCTION

This risk assessment was completed as a requirement for a coral survey plan and risk assessment as outlined in Sections 2.5.2.1 (*Wellsite Surveys – Drill Planning*) and 8.3.2 (*Summary of Key Mitigations*) of the *ExxonMobil Canada Ltd. Eastern Newfoundland Offshore Exploration Drilling Project Environmental Impact Statement* (ExxonMobil 2017) as well as Condition 3.6 from the Decision Statement issued under Section 54 the Canadian Environmental Assessment Act, 2012 for the Eastern Newfoundland Offshore Exploration Drilling Program (Canadian Environmental Assessment Agency, 2019).

Through consultations with Canada East Drilling, Environment and Regulatory (E&R) and Central Safety, Security, Health and Environment (SSH&E), a purpose-built Marine Environmental Risk Assessment (mERA) has been completed for the 2019 Flemish Pass EL 1134 and EL1135 Exploration drilling operations.

ExxonMobil has contracted Seadrill to provide the fully certified West Aquarius mobile offshore drilling unit (MODU) to drill an exploration well (Hampden) on Exploration Licence (EL) 1134, as well as an exploration well (Harp) on EL 1135. Drilling is expected to start in 3Q19 and will require approximately two months to complete at each licence. At the Hampden well location (EL 1134), the drill rig will maintain position by use of a DP system, as the seabed depth is approximately 1,180 metres (m). At the Harp well location (EL 1135), the drill rig will be moored in position over the drilling site using mooring lines and anchors, as the water depths are shallower at approximately 298 m.

2.0 EXPLORATION ACTIVITIES

Two exploration wells are planned for the second half of 2019, Hampden and Harp. The Hampden well is currently planned to be a deviated well drilled with Seadrill's West Aquarius MODU in the fourth quarter of 2019 in EL1134 (Figure 1.0). Target depths range from 2,156 to 3,781 m True Vertical Depth sub-sea (TVDss) at the well location.

The Harp well is also planned to be a deviated well drilled in the third quarter of 2019 in licence EL 1135 (Figure 1.0) Target depths will be up to 3,445 to 4,663 m TVDss at the well location.

Once the MODU has been positioned and, in the case of the Harp well location, moored, the initial top hole "riserless" drilling will commence. Two riserless hole sections will be drilled (28" x 42" hole for 36" conductor casing, 28" hole for 22" casing). The initial sections are drilled using a water-based mud (WBM), where fluid and cuttings are returned to the seabed in accordance with the *Offshore Waste Treatment Guidelines* (OWTG) (NEB et al., 2010).

After each top-hole section is drilled, the conductor / surface casing will be run and cemented to the seabed. The Blow-out Preventer (BOP) and marine riser will then be installed to drill the remaining sections of the well, which will utilize low-toxicity SBM. The BOP/marine riser establishes a closed-loop system, enabling drilling fluids and cuttings to be returned to the rig. The drilling fluids and cuttings are subsequently separated utilizing shale shakers. Cuttings are then treated and dried prior to discharge overboard, while the drilling fluids will be recycled and used again for circulation in the wellbore.

Drill cuttings are the small pieces of rock, ranging in size from coarse sand to fine silts and clays, created when a drill bit penetrates rock. The material is moved up the annulus of the wellbore as drilling proceeds through circulation of drilling fluids. The composition of the drill cuttings is dependent on the stratigraphy of the area, the type of drill bit used, the type of drilling fluid used and the nature of the cuttings treatment applied on the MODU prior to discharge to the ocean. The drill cuttings composition, along with water depth and ocean current, determine the deposition of the cuttings on the seabed.

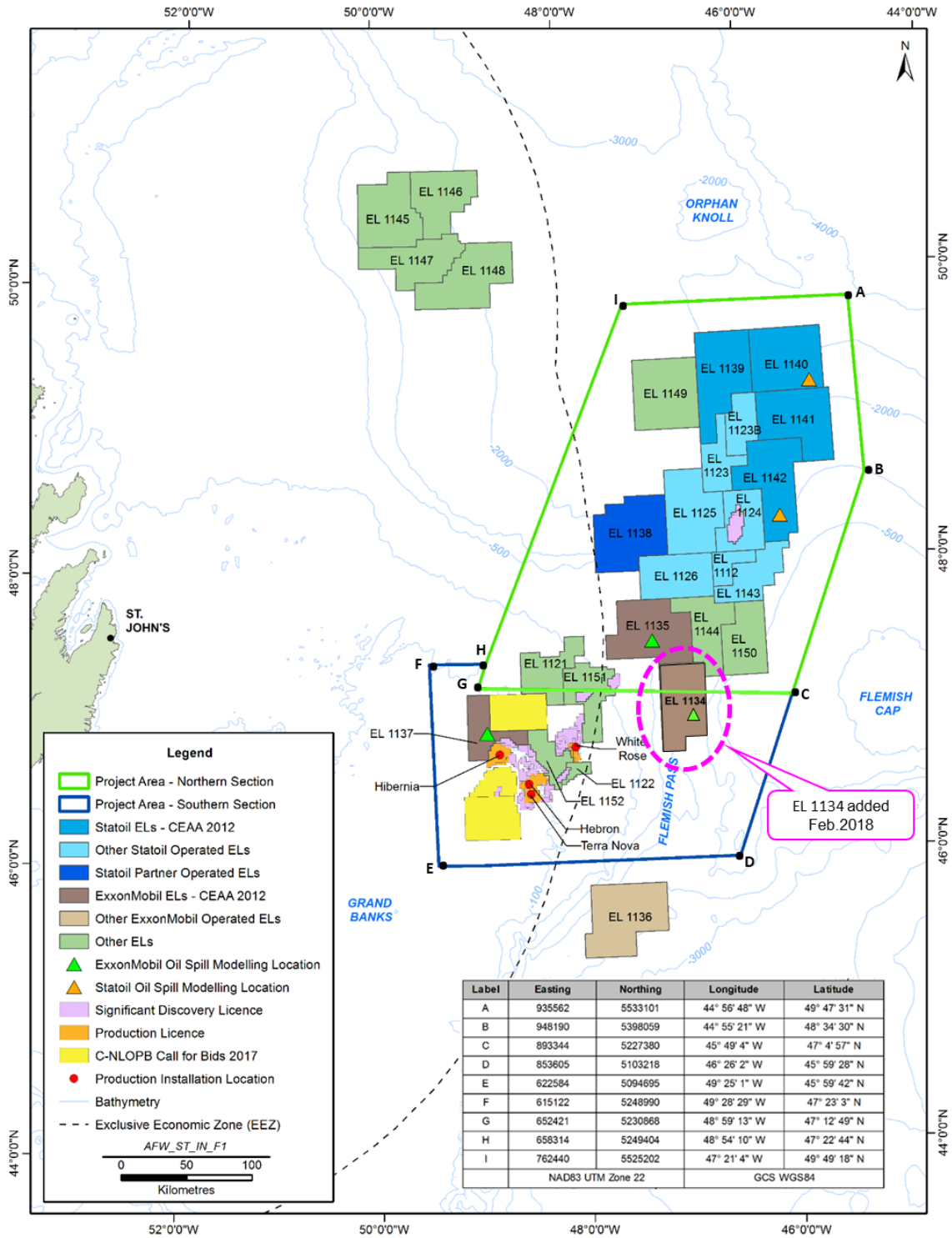


Figure 1.0 Regional map of EL 1134 and EL 1135 licences.

2.1 Studies Completed to Assess Potential Impact

Three studies were commissioned in support of the exploration drilling campaign at both the Hampden (EL 1134) and Harp (EL 1135) well locations. The first of these studies was completed by Wood Environment and Infrastructure Group (Wood), and modeled the dispersion of cuttings to

assess their potential impact on the benthic invertebrate species (ExxonMobil Canada Ltd, 2018). The second study was undertaken by Oceaneering Ltd. and RPS Energy Canada Ltd. (RPS), through the use of a remotely operated vehicle (ROV), in order to collect benthic species data at the well site, along transects to the south, corresponding to the modeled cuttings dispersion plume, as well as anchor pre-lay locations. The ROV was flown approximately 1.0 m above the seabed at a slow and constant speed. When selected large epifaunal taxa were seen, the ROV became stationary, and the specimen was measured. As the exact location of the wellhead and anchor patterns have been finalized at the Harp well location (EL 1135), a third study was completed in July 2019 by Oceaneering Ltd. and Wood Environment and Infrastructure Solutions. A Phase Two Site-Investigation acquired additional ROV video to identify the entirety of all anchor chains, plus 50 m beyond the anchors resting point on the seabed.

3.0 SURVEY RESULTS – HAMPDEN WELL LOCATION (EL 1134)

3.1 Hampden Well Location (EL 1134) – Survey Components

ROV video data was acquired during the fall of 2018, for the following locations:

1. Drill Center: full coverage over a 200 m x 200 m area within the drill site;
2. Dispersal Area: series of 1000 m long video transects positioned at 200 m, 300 m, 400 m, 500 m, 700 m, 1000 m and 1400 m from the drill center location over the cuttings dispersal model footprint.

Shown in Figure 2.0 is the 2018 Flemish Pass Hampden (EL1134) cold-water coral and sponge survey line locations. The irregular and elongated blue polygon represents the drill cuttings dispersal model. The yellow square indicates a 200 m x 200 m centered on the drill center location. The blue lines represent a series of 1000 m long ROV video transects at the various distances from the drill center locations (*ExxonMobil Canada Ltd. 2018 EL1134 Flemish Cap Site-Investigation/Geohazard Survey Program Description (Approved Program #: 24120-020-013)*).

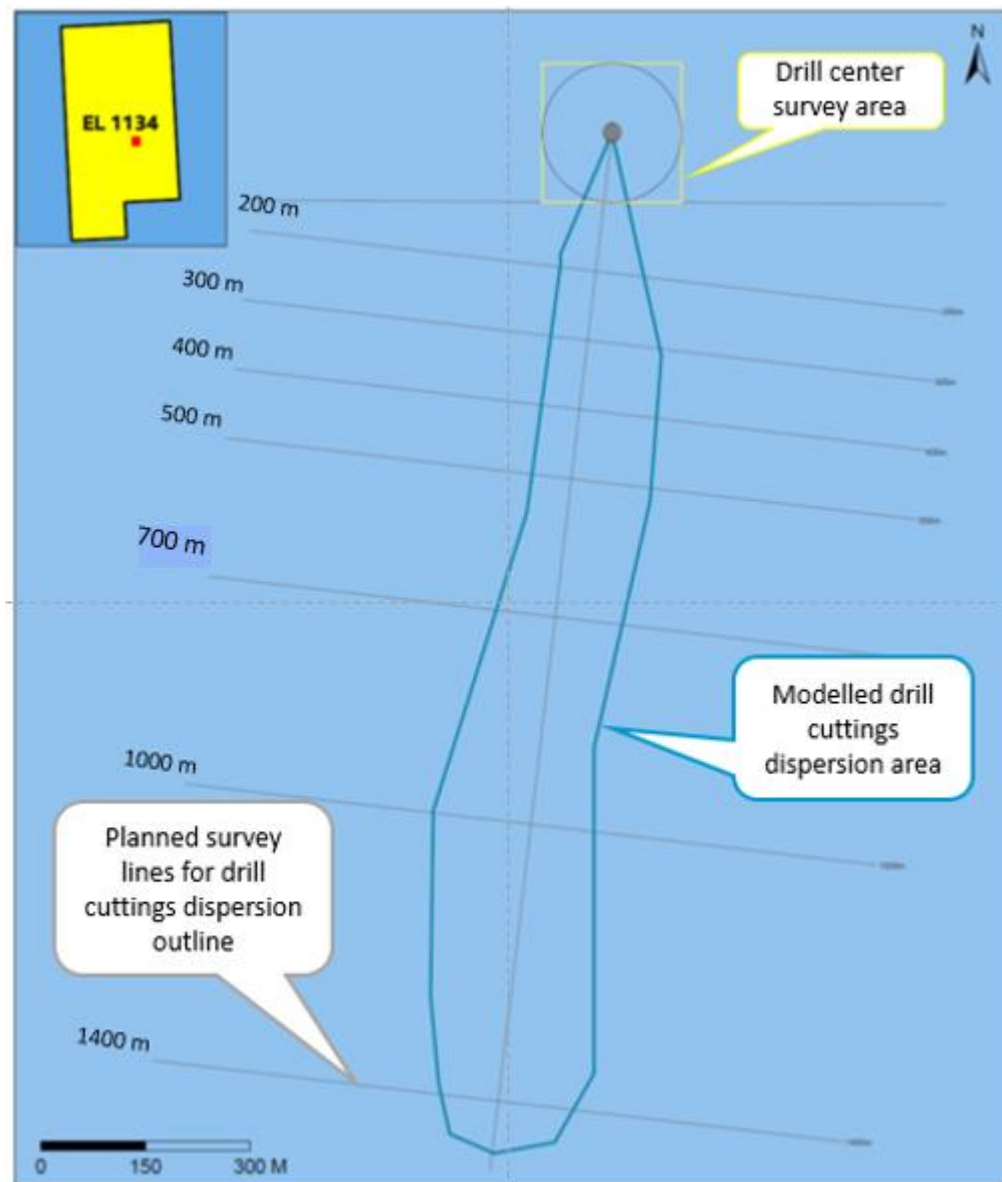


Figure 2.0 EL 1134 Survey Methodology

3.2 Hampden Well Location (EL 1134) – Benthic Community

The benthic megafaunal community was comprised of cold-water soft corals, sea pens, sponges, sea anemones, and hydrozoans. The substrate throughout most of the survey area consisted of sand and small rocks, although larger boulders were also observed. A total of 1,089 observations were recorded during the survey, the majority of which were of soft corals. Total coral abundance (all species combined) was estimated to be 3,434 individuals. Note that ‘observations’ are time references in the survey video files, that can include one or more species or individuals identified at that location and ‘abundance’ refers to the number of individuals recorded at that point. Sea pens appeared to be the dominant coral group at the Hampden well location (EL 1134) and occurred in high abundances throughout the survey area. Due to these high concentrations, sea pens were not consistently recorded. Based upon the expert opinion of the marine biologists conducting the survey, it is reasonable to estimate that the Hampden well location (EL 1134) contains double the number of sea pens to cold-water soft corals.

Two species of sea pens were observed:

1. *Anthoptilum grandiflorum*
2. *Halipteris finmarchia*.

Anthoptilum grandiflorum was the more abundant species and both species were typically observed on a sandy substrate.

Four species of cold-water corals (*Octocorallia: Alcyonaceae*) were recorded in the survey area, including three species of soft coral, *Duva florida*, *Gersemia* sp. (possibly *Gersemia fruticosa*), and *Anthomastus grandiflorus*, and one species of bamboo coral, *Acanella arbuscular*. *Duva florida* was by far the most abundant species, with 3,262 individuals recorded, ranging in size from 5 - 40 centimeters (cm). *Gersemia* sp., *A. arbuscular* and *A. grandiflorus* made up the remaining 172 individuals, with only one observation of *Gersemia* sp. greater than 30 cm in size.

A wide variety of sponge species were recorded during the survey. Various sponges in the genus *Polymastia* (Class: *Desmospongiae*) were the most commonly recorded observation and ranged in size from 5 - 20 cm. A number of large vase-shaped and fan-shaped sponges were also recorded, with some individuals reaching 50 - 60 cm in size. A small number of the glass sponge *Asconema foliata* were also recorded. Sponges were recorded in 146 observations and were typically solitary. Refer to Figure 3.0 for a map showing the identified sponges at the Hampden well location.

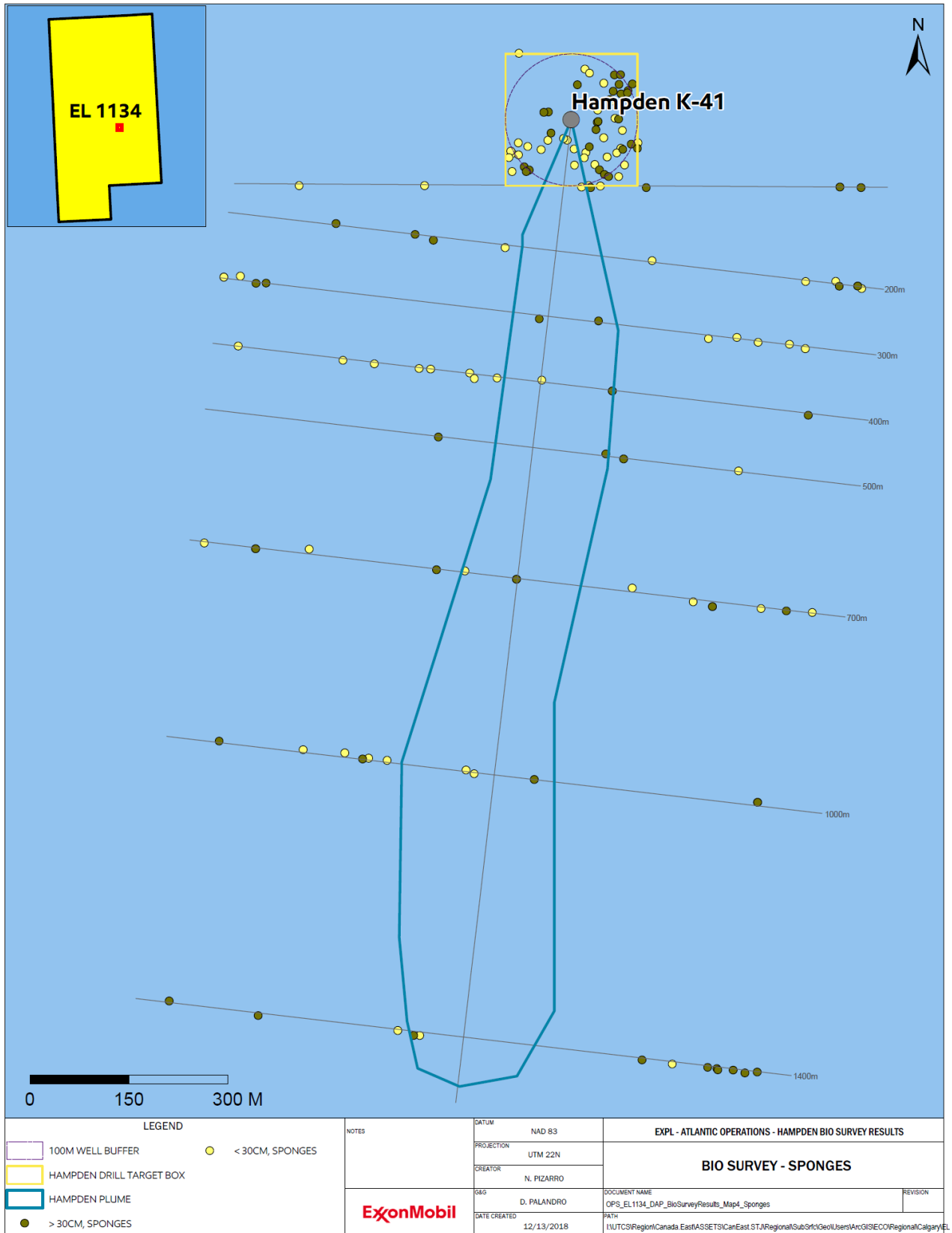


Figure 3.0 Hampden Well Location (EL 1134) – All Sponges - Well and Dispersal Plume Area

Appendix A provides a detailed list of the observations recorded during the cold water coral and sponge survey completed at the Hampden well location (EL 1134). Note that observations in many instances can include one or more species or individuals. Figure 4.0 below shows the four species of CWC observed in the Hampden well location (EL 1134) and are mapped regardless of size. Those that have been measured as being greater than 30 cm in size have been displayed in the map as a larger blue dot with the corresponding size included.

3.3 Hampden Well Location (EL 1134) – Potentially Sensitive Habitat or Species – Drill Center

Benthic invertebrate species that were identified in the 2018 program were mapped, with the exception of sea pens, due to the large abundance and distribution, to assess the spatial distribution and compare to the C-NLOPB good practice guidance, which remarks the *National Advisory Panel on Marine Protected Area Standards* and states that a 'coral aggregation' is defined as either a *Lophelia Pertusa* reef complex or five or more corals larger than 30 cm in height or width within a 100 m² area. As outlined in the red boxes below in Figure 4.0, there are two identified locations within the 100 m² at the drill center that meet the C-NLOPB good practice, which is dominated by soft coral, *Duva Florida* and 30 cm in size. Figure 4.0 shows the four species of CWC observed in the Hampden well location (EL 1134) and are mapped regardless of size. Those that have been measured as being greater than 30 cm (*Duva Florida*) in size have been displayed in the map as a larger blue dot with the corresponding size included.

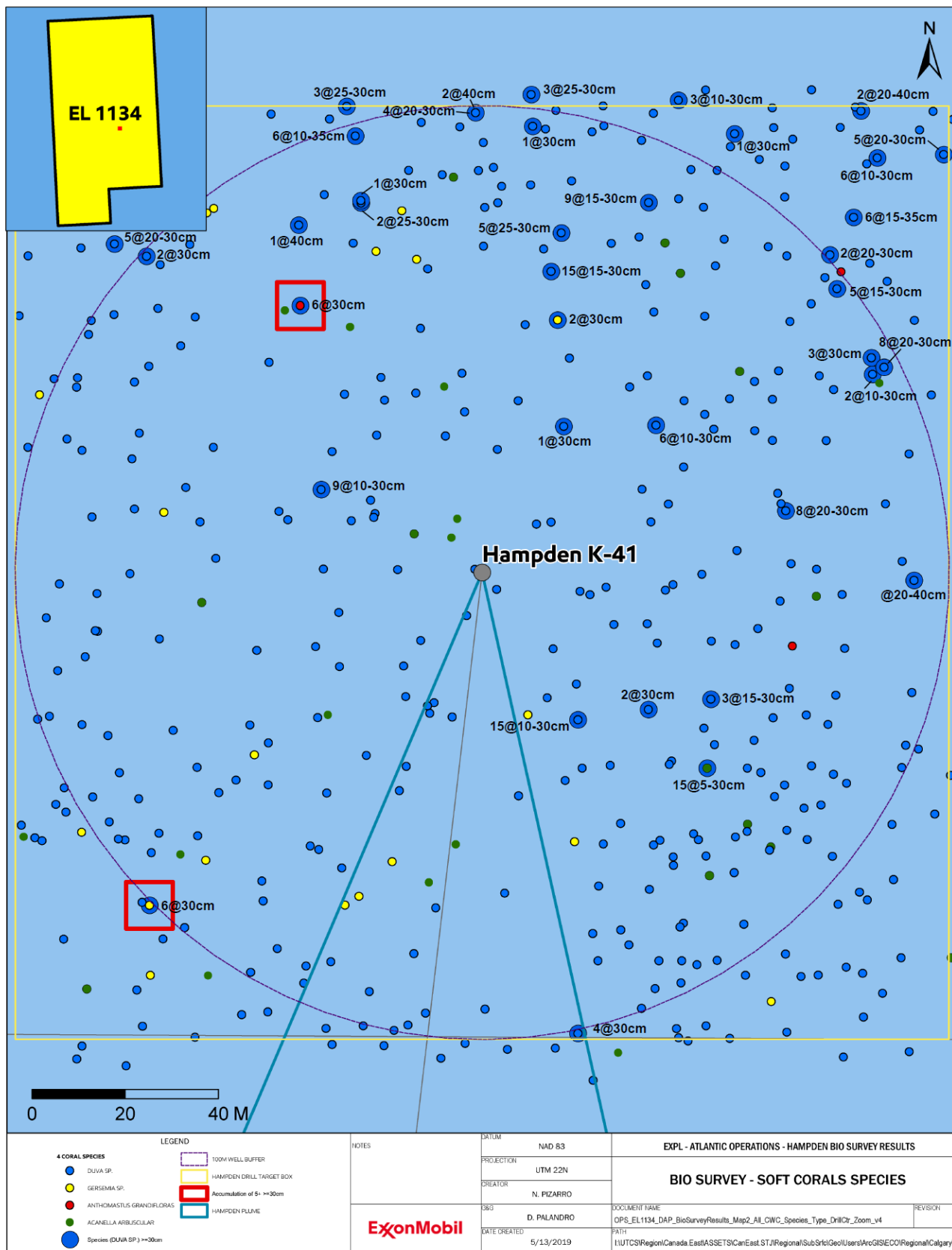


Figure 4.0 Location map of Hampden (EL 1134) drill center in relation soft corals species.

4.0 SURVEY RESULTS – HARP WELL LOCATION (EL 1135)

4.1 Harp Well Location (EL 1135) – Survey Components

ROV video data was acquired during the summer of 2018 and 2019 at the following locations at the Harp well location (EL 1135):

1. Drill Center - Full coverage video over a 200 m x 200 m block centered on the drill site
2. Dispersal Area - A series of 750 m long video transects positioned at 200 m, 300 m, 400 m, 500 m, 750 m, 1000 m and 1200 m from the drill center location over the cuttings dispersal model footprint
3. Anchor Pre-lays - The entire length of mooring line including 50 m past the extent of the anchors. The spread mooring system consists of all chain components with eight (8) mooring lines that extend 1,500 m from the drill center to the anchor setting points. A total of 1,550 m per line was surveyed to meet regulatory requirements.

Shown in Figure 5.0 below, is the 2018/2019 Flemish Pass Harp well location (EL1135) cold-water coral and sponge survey line locations. The irregular and elongated blue polygon represents the drill cuttings dispersal model. The yellow square indicates a 200 m x 200 m full coverage ROV video survey centered on the drill center location. The blue lines represent a series of 750 m long ROV video transects at various location from the drill center location (ExxonMobil Canada Ltd. 2018 EL1135 Flemish Cap Site-Investigation/Geohazard Survey Program Description (Approved Program #: 24120-020-014). In 2019, during the Phase-Two Site Investigation – Coral and Sponge Survey, the entire length of all eight mooring lines were surveyed (1,550 m) including 50 m past the extent of the anchors (Approved Program #: 24220-020-020).

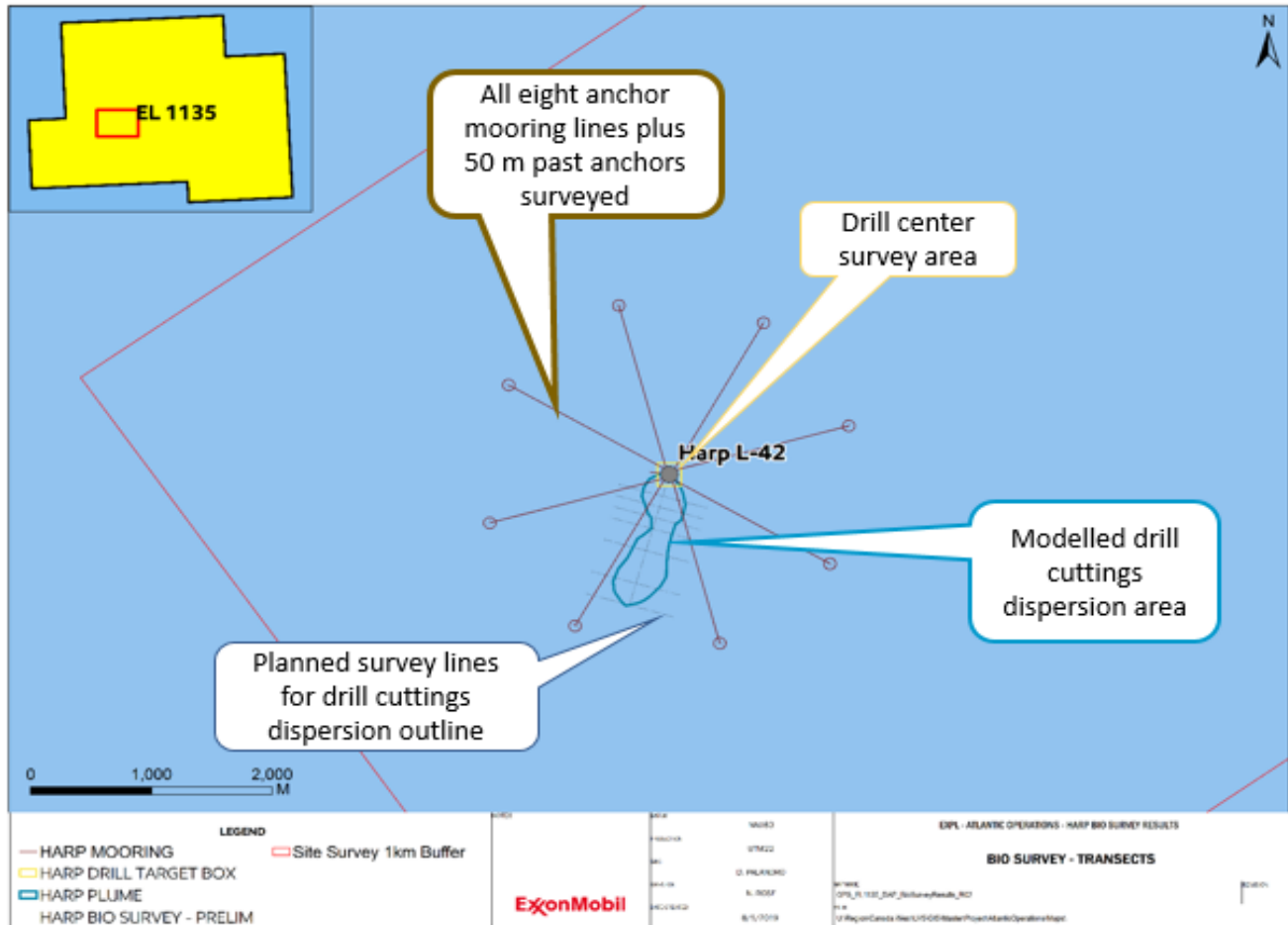


Figure 5.0 Harp Well Location (EL 1135) Survey Methodology

4.2 Harp Well Location (EL 1135) – Benthic Community

The benthic megafaunal community was comprised mostly of anemones, hydrozoans, and small sponges (< 30 cm). Sea anemones were the dominant megafauna observed during the survey and occurred consistently throughout the survey area. Both solitary and colonial hydroids were observed, ranging in size from 5 - 40 cm. A wide variety of sponge species were observed, ranging in size from < 5 - 30 cm.

A single genus of cold-water soft coral was observed in the survey area, *Gersemia* sp. A total of 26 individuals were recorded, ranging in height from 5 - 25 cm. The majority of observations occurred along transects in the drill cuttings dispersal area at depths of approximately 300 m. A single *Gersemia* was observed in the drill center survey area, and a total of 9 *Gersemia* were found along the anchor mooring lines. *Gersemia* were typically found as solitary individuals attached to soft sediment.

Appendix B and C provides a detailed list of the observations recorded during the cold water coral and sponge survey completed at EL 1135.

4.3 Harp Well Location (EL 1135) – Potentially Sensitive Habitat or Species – Drill Center

There were no recorded soft corals located within the drill center that meet the C-NLOPB good practice of five or more corals larger than 30 cm in height or width within a 100 m² area (Figure 6.0).

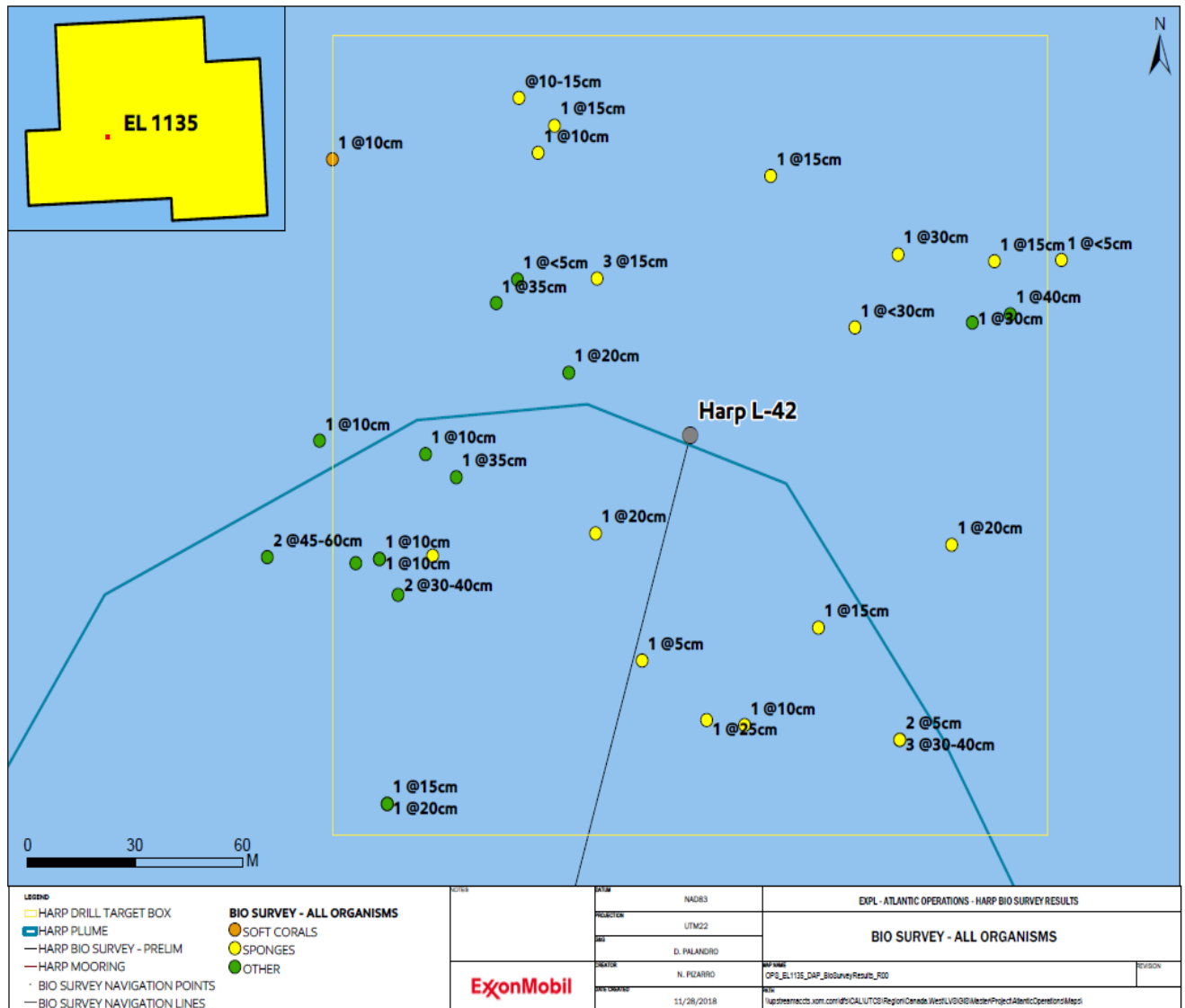


Figure 6.0 Location map of Harp drill center (EL 1135) in relation to soft corals species.

4.4 Harp Well Location (EL 1135) – Potentially Sensitive Habitat or Species – Anchor Pre-lay Areas

A total of 12,000 m of seabed was surveyed using ROV video along the eight spokes radiating from the drill outline. Transects extended 50 m beyond the planned locations of anchors. Depth along the survey transects varied from 293 m to 312 m. A total of nine corals (above 5 cm) were investigated within the study area. All corals observed were *Gersemia sp.* soft corals, which ranged in height from 10 cm to 20 cm with an average of 17.6 cm. These corals were solitary, and typically living on fine sediment substrate, though one soft coral was observed growing on a boulder. In general, investigated corals were sparse overall, but distributed in six of eight transects. The C-NLOPB’s definition of a coral colony was not met within the survey area as all observed coral species were below 30 cm in height. No reef-forming corals (*L. pertusa*) were observed within the surveyed area. A total of 100 sponges were documented throughout the study area. A variety of sponge functional groups were observed, including solid / massive, leaf / vase shape, round with projections, thin-walled complex, and other (typically finger sponges). The dominant functional group was solid / massive sponges, representing 55 percent of all documented individuals. Other sponges, typically encrusting or finger / branching sponges, were the second

largest functional group at 21 percent of individuals. Sponge height and/or width ranged from <5 cm (small solid / massive sponges, typically not photographed) to 53 cm (leaf / vase sponge). Sponges were typically solitary and no clusters of five or more over 30 cm were documented. See Figure 7.0 below for a map showing all species type.

Appendix C provides a detailed list of the observations recorded during the 2019 cold water coral and sponge survey completed at EL 1135.

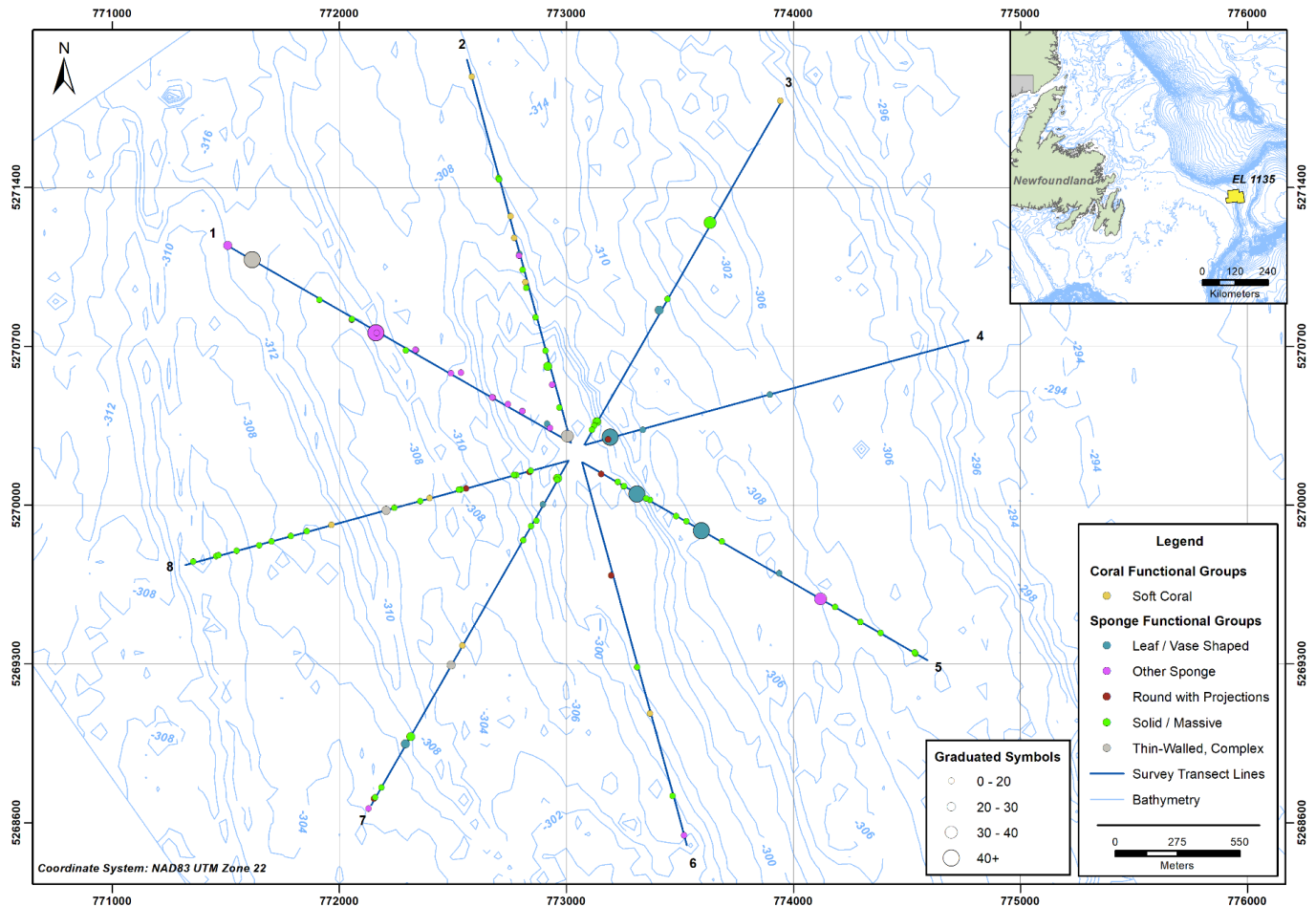


Figure 7.0: Harp Well Location (EL 1135) – All Species Type – Anchor Pre-lays

5.0 DISPERSION PLUME MODELLING – HAMPDEN AND HARP WELL LOCATIONS

For both the Harp and Hampden well locations a numerical computer model (*Drill Cuttings Dispersion Modeling, Exploration Drilling for EL 1134 and EL 1135*) was developed by Wood and included in Appendix G of the *EMCL Eastern Newfoundland Offshore Exploration Drilling Project Environmental Impact Statement* (ExxonMobil 2017). The model employs a transport computation to simulate the advection of dispersed drill cuttings materials in three dimensions through the water column, following release into the sea, until the particles come to rest on the sea bottom. Key inputs for the model include cuttings particle characterizations and ocean currents. The primary outputs are predictions of the deposition pattern of released drill cuttings on the seabed (e.g., weight, density, thickness of cuttings, and times of year). With the potential to drill a well at any time during the year, four model simulation runs or ‘scenarios’ (for March, June, September, December) are considered to capture the associated seasonal variation in ocean currents. Each scenario model run provides a prediction of the initial cuttings footprints from drilling of a representative (i.e., similar water depth and current regime) well for a given time of year. Based on these

data, cuttings deposition map figures are presented for each scenario. These maps include footprints of the modelled thicknesses for synthetic-based mud (SBM) cuttings, water-based mud (WBM) cuttings, and total cuttings above predicted no effect thresholds (PNET) of 1.5 and 6.5 mm.

6.0 DISPERSION PLUME MODEL RESULTS - HAMPDEN WELL LOCATION (EL 1134)

6.1 Hampden Well Location (EL 1134) – Potentially Sensitive Habitat or Species – Cuttings Dispersal Area

Based upon the observations mapped, there were zero locations that meet C-NLOPB guidance, along the modelled cuttings dispersal model footprint (Refer to Figure 8.0). There were two observations at 500 m, outside the cuttings dispersal area, that had five *Duva Florida* observed at > 30 cm, and eight *Gersemia sp.*, > 30 cm. At the 700 m transect there were also observations of 8 *Duva Florida*, > 30 cm and 10 *Duva Florida*, > 30 cm.

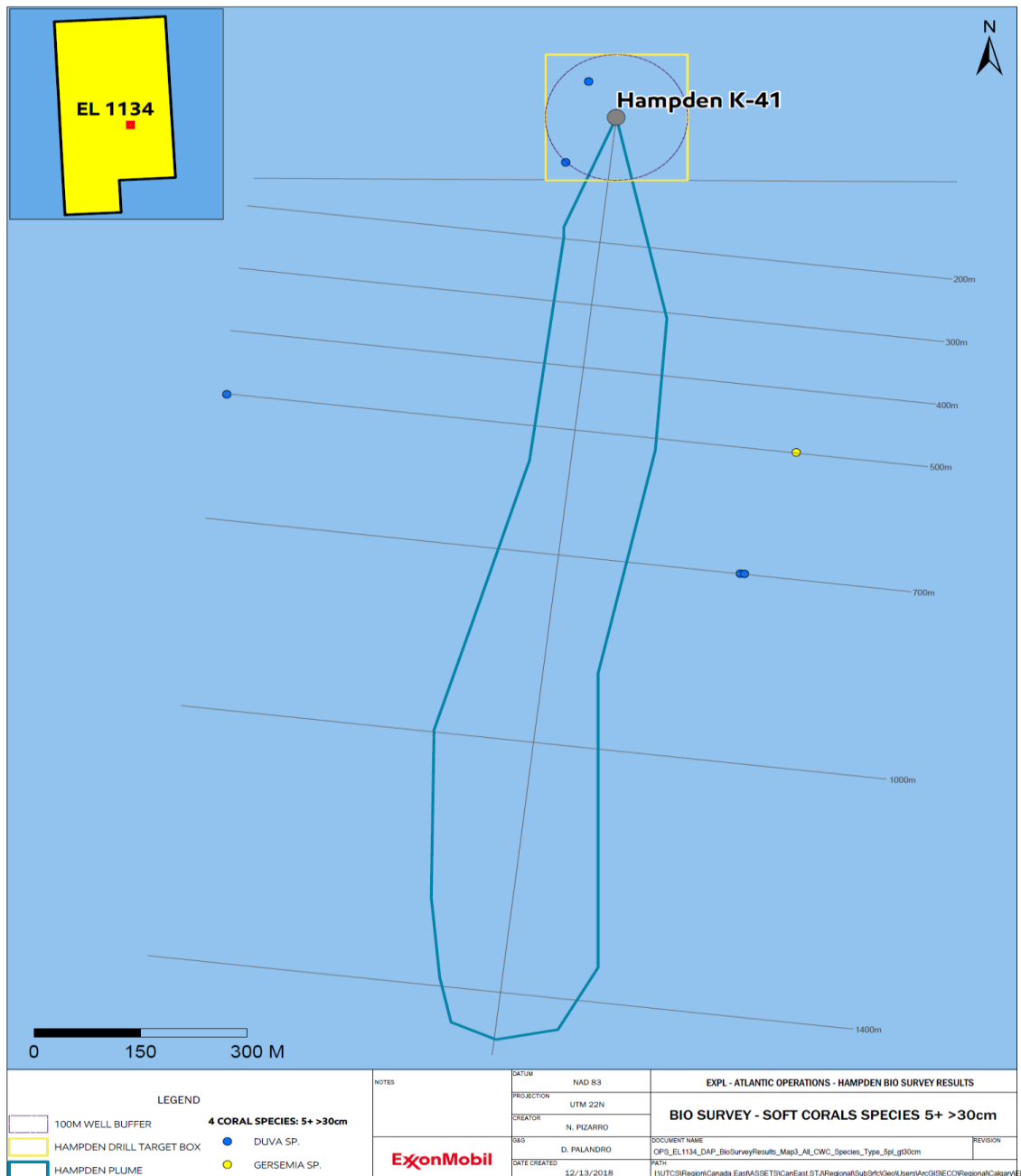


Figure 8.0 Location map of Hampden well location (EL 1134) - Modelled cutting dispersal area showing potentially sensitive coral species.

7.0 DISPERSION PLUME MODEL RESULTS – HARP WELL LOCATION (EL 1135)

7.1 Harp Well Location (EL 1135) – Potentially Sensitive Habitat or Species – Cuttings Dispersal Area

A single genus of cold water soft corals were observed in the survey area, *Gersemia sp.* A total of 17 individuals were recorded, ranging in height from 5 to 25 cm. The majority of observations occurred along the transects in the drill cuttings dispersal area and are at depths of approximately 300 m. There were zero locations that meet C-NLOPB guidance along the modelled cuttings dispersal model footprint. Refer to Figure 9.0 below.

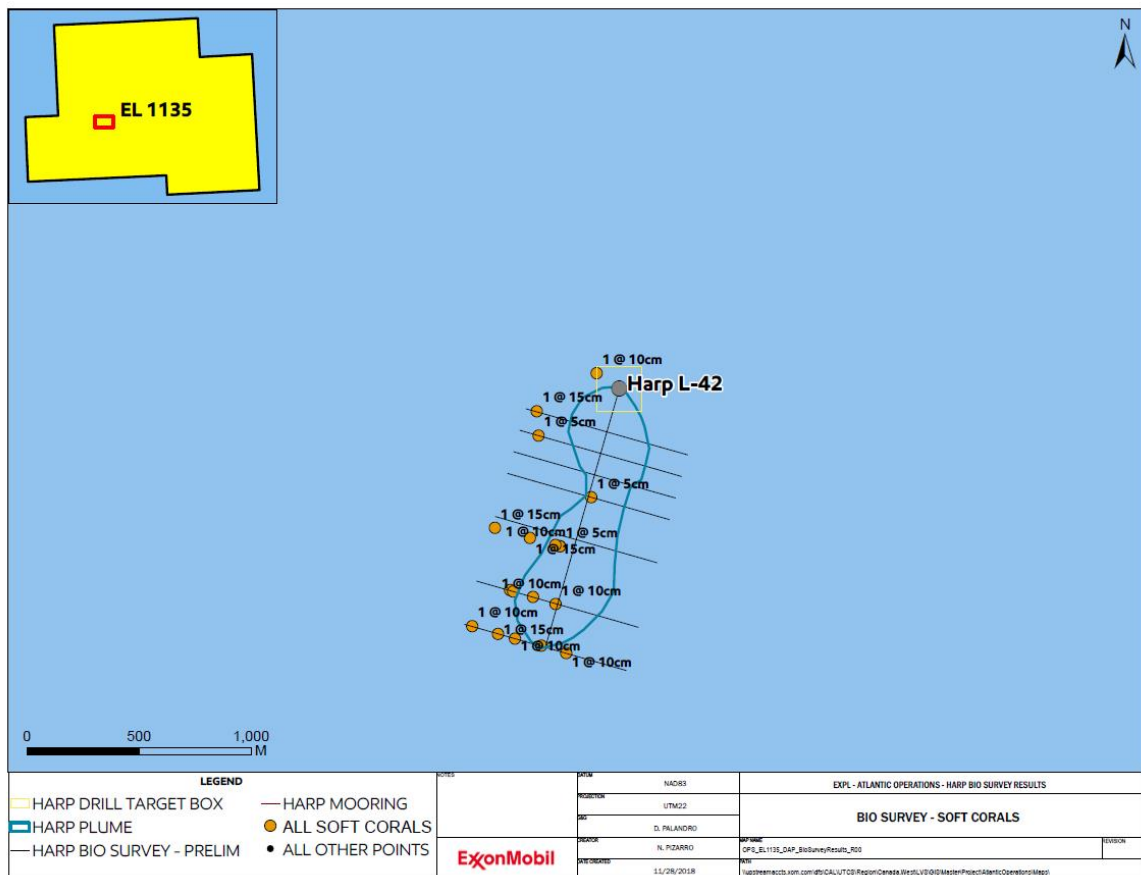


Figure 9.0 Location map of Harp Well Location (EL 1135) - Cuttings dispersal area showing potentially sensitive coral species.

8.0 CONCLUSIONS

Hampden Well Location (EL 1134)

During initial exploration drilling activities at the Hampden well location (EL 1134), two C-NLOPB CWC ‘aggregations’ were identified in the 200 x 200 m drill center and have the potential to be physically impacted. During exploration drilling activities, the discharge of cuttings impact C-NLOPB good practice CWC ‘aggregations’ by burial or other mechanism. No C-NLOPB CWC ‘aggregations’ were identified in the modeled cuttings dispersal area.

It is recommended that with the use of an ROV prior to drilling, the final well location be determined to ensure avoidance of any C-NLOPB CWC ‘aggregations’. Given the recommended prevention and mitigation measures, the short duration and environmental setting, the potential risk to the marine environment from the exploration drilling operations at the Hampden well location is a lower risk and would not lead to an ecologically significant impact.

Harp Well Location (EL 1135)

Based upon observations of CWCs in the Harp well location (EL 1135), there will be no impact to any CWC ‘aggregations’ during the exploration drilling activities. There are no impacts to any CWC ‘aggregations’, therefore no additional mitigation measures will be required.

9.0 REFERENCES

Beazley, L.I. and Kenchington, E.L. 2015. Epibenthic Megafauna of the Flemish Pass and Sackville Spur (Northwest Atlantic) Identified from In Situ Benthic Image Transects. Can. Tech.Rep. Fish. Aquat. Sci.

ExxonMobil Canada. 2017. ExxonMobil Canada Ltd. Eastern Newfoundland Offshore Exploration Drilling Project (CEAR 80132) Environmental Impact Statement. ExxonMobil Canada Ltd. St. John’s, NL.

ExxonMobil Canada. 2018. ExxonMobil Canada Ltd. Eastern Newfoundland Offshore Exploration Drilling Project (2018-2029). Environmental Impact Statement Addendum: Addition of EL 1134. ExxonMobil Canada Ltd. St. John’s, NL.

ExxonMobil Canada. 2018. ExxonMobil Canada Ltd. Flemish Pass EL 1134 Site Investigation/Geohazard Survey Program (Program #: 24120-020-013). ExxonMobil Canada Ltd. St. John’s, NL.

ExxonMobil Canada. 2018. ExxonMobil Canada Ltd. Flemish Pass EL 1135 Site Investigation/Geohazard Survey Program (Program #: 24120-020-014). ExxonMobil Canada Ltd. St. John’s, NL.

ExxonMobil Canada. 2019. ExxonMobil Canada Ltd. 2019 – Environmental Program – Coral and Sponge Survey (Program #: 24220-020-020). ExxonMobil Canada Ltd. St. John’s, NL.

NEB (National Energy Board), Canada-Newfoundland and Labrador Offshore Petroleum Board and Canada-Nova Scotia Offshore Petroleum Board). 2010. Offshore Waste Treatment Guidelines. vi + 28 pp.

RPS. 2018. Cold Water Coral and Sponge Survey Report: September 2018 Flemish Pass EL1135 – Offshore Newfoundland. RPS Energy Canada, St. John’s, NL.

RPS. 2018. Cold Water Coral and Sponge Survey Report: September 2018 Flemish Pass EL1134 – Offshore Newfoundland. RPS Energy Canada, St. John’s, NL.

Wood. 2019. EL 1135 2019 Coral and Sponge Survey Report. Wood Environment and Infrastructure Solutions, St. John’s, NL.

10.0 APPENDICES

Appendix A – EL 1134 (Hampden) Benthic Observations

Transect	Date	Time (NDT)	Depth (m)	Class	Species ID	Abundance	Size (cm)	Condition	Substrate	Comments
Drill Center - 1	Sep-22-2018	7:25	1181	Octocorallia	Duva sp.	2	10-20	good	sand	unidentified sponge ~ 15 cm
Drill Center - 1	Sep-22-2018	7:31	1181	Porifera	sponge	1	n/a	dead	sand	white colour, appears fragmented
Drill Center - 1	Sep-22-2018	7:34	1181	Octocorallia	Duva sp.	2	10-20	good	sand	
Drill Center - 1	Sep-22-2018	7:36	1181	Octocorallia	Anthoptilum grandiflorum	1	n/a	good	sand	sea pen
Drill Center - 1	Sep-22-2018	7:40	1181	Octocorallia	Duva sp.	6	10-25	good	sand	
Drill Center - 1	Sep-22-2018	7:42	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center - 1	Sep-22-2018	7:42	1181	Octocorallia	Duva sp.	5	15	good	sand	
Drill Center - 1	Sep-22-2018	7:50	1181	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center - 1	Sep-22-2018	7:51	1181	Octocorallia	Anthoptilum grandiflorum	1	n/a	good	sand	purple squid
Drill Center - 1	Sep-22-2018	7:56	1181	Octocorallia	Duva sp.	2	20-25	good	sand	
Drill Center - 1	Sep-22-2018	7:57	1181	Octocorallia	Duva sp.	4	25-30	good	sand	
Drill Center - 1	Sep-22-2018	7:59	1181	Octocorallia	Duva sp.	1	25	good	rock	
Drill Center - 1	Sep-22-2018	8:03	1181	Octocorallia	Duva sp.	1	25	good	sand	
Drill Center - 1	Sep-22-2018	8:05	1181	Octocorallia	Duva sp.	2	40	good	sand	polymastia sponge (10cm)
Drill Center - 1	Sep-22-2018	8:13	1181	Octocorallia	Duva sp.	4	20 - 30	good	sand	
Drill Center - 1	Sep-22-2018	8:14	1181	Octocorallia	Duva sp.	3	25-30	good	rock	(2) polymastia sponges 5cm
Drill Center - 1	Sep-22-2018	8:17	1181	Octocorallia	Duva sp.	1	30	good	rock	
Drill Center - 1	Sep-22-2018	8:20	1181	Octocorallia	Duva sp.	6	15-25	good	sand	polymastia sponge (5cm)
Drill Center - 1	Sep-22-2018	8:23	1181	Octocorallia	Duva sp.	7	20-25	good	rock	
Drill Center - 1	Sep-22-2018	8:27	1181	Octocorallia	Duva sp.	4	25	good	sand	
Drill Center - 1	Sep-22-2018	8:30	1181	Octocorallia	Duva sp.	3	10-30	good	sand	
Drill Center - 1	Sep-22-2018	8:32	1181	Octocorallia	Duva sp.	2	10-15	good	sand	
Drill Center - 1	Sep-22-2018	8:44	1181	Octocorallia	Duva sp.	20	15-25	good	rock	

Drill Center - 1	Sep-22-2018	8:49	1181	Octocorallia	Duva sp.	2	25	good	sand	
Drill Center - 1	Sep-22-2018	8:50	1181	Octocorallia	Duva sp.	6	15-20	good	sand	polymastia 5cm (1)
Drill Center - 1	Sep-22-2018	8:53	1181	Octocorallia	Duva sp.	2	10-15	good	sand	
Drill Center - 1	Sep-22-2018	8:54	1181	Octocorallia	Duva sp.	2	20-40	good	sand	
Drill Center - 1	Sep-22-2018	8:57	1181	Octocorallia	Duva sp.	3	10-20	good	rock	
Drill Center - 1	Sep-22-2018	9:00	1181	Octocorallia	Duva sp.	6	10-20	good	rock	
Drill Center - 1	Sep-22-2018	9:01	1181	Octocorallia	Duva sp.	3	15-20	good	rock	
Drill Center - 1	Sep-22-2018	9:05	1181	Octocorallia	Duva sp.	10	15-20	good	rock	unidentified sponge ~ 20 cm
Drill Center - 1	Sep-22-2018	9:07	1181	Octocorallia	Duva sp.	6	20-25	good	rock	unidentified sponge ~ 25-30 cm
Drill Center - 2	Sep-22-2018	9:15	1181	Octocorallia	Duva sp.	5	20-30	good	rock/sand	
Drill Center - 2	Sep-22-2018	9:16	1181	Octocorallia	Duva sp.	6	10-30	good	rock	
Drill Center - 2	Sep-22-2018	9:20	1181	Octocorallia	Duva sp.	3	20-25	good	sand	
Drill Center - 2	Sep-22-2018	9:21	1181	Octocorallia	Duva sp.	4	15-20	good	rock	polymastia 5 cm (1)
Drill Center - 2	Sep-22-2018	9:24	1181	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center - 2	Sep-22-2018	9:26	1181	Octocorallia	Duva sp.	1	30	good	sand	
Drill Center - 2	Sep-22-2018	9:28	1181	Octocorallia	Duva sp.	9	15-20	good	rock/sand	
Drill Center - 2	Sep-22-2018	9:31	1181	Octocorallia	Duva sp.	4	15-20	good	rock	
Drill Center - 2	Sep-22-2018	9:35	1181	Octocorallia	Duva sp.	10	10-20	good	rock/sand	
Drill Center - 2	Sep-22-2018	9:36	1181	Octocorallia	Duva sp.	6	15	good	rock	polymastia 5 cm (4)
Drill Center - 2	Sep-22-2018	9:38	1181	Octocorallia	Duva sp.	4	15	good	rock	unidentified sponge 20 cm
Drill Center - 2	Sep-22-2018	9:40	1181	Octocorallia	Duva sp.	3	10-15	good	rock	
Drill Center - 2	Sep-22-2018	9:40	1181	Octocorallia	Gersemia sp.	1	10	good	rock	
Drill Center - 2	Sep-22-2018	9:42	1181	Octocorallia	Duva sp.	5	10-20	good	rock	
Drill Center - 2	Sep-22-2018	9:44	1181	Octocorallia	Duva sp.	3	10-20	good	rock	polymastia 20 cm (1)
Drill Center - 2	Sep-22-2018	9:45	1181	Octocorallia	Duva sp.	6	10-35	good	rock	
Drill Center - 2	Sep-22-2018	9:49	1181	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center - 2	Sep-22-2018	9:52	1181	Octocorallia	Duva sp.	4	20	good	rock	

Drill Center - 2	Sep-22-2018	9:55	1181	Octocorallia	Duva sp.	3	15	good	rock	
Drill Center - 2	Sep-22-2018	9:57	1181	Octocorallia	Duva sp.	3	15-20	good	rock	
Drill Center - 2	Sep-22-2018	9:57	1181	Octocorallia	Gersemia sp.	1	10	good	sand	
Drill Center - 3	Sep-22-2018	10:28	1181	Octocorallia	Duva sp.	4	15-20	good	sand	
Drill Center - 3	Sep-22-2018	10:30	1181	Octocorallia	Duva sp.	2	15-20	good	sand	
Drill Center - 3	Sep-22-2018	10:30	1181	Octocorallia	Duva sp.	2	15-25	good	sand	
Drill Center - 3	Sep-22-2018	10:32	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center - 3	Sep-22-2018	10:37	1181	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center - 3	Sep-22-2018	10:37	1181	Octocorallia	Gersemia sp.	1	10	good	rock	unidentified sponge (1) 20cm
Drill Center - 3	Sep-22-2018	10:42	1181	Octocorallia	Acanella	1	25	good	sand	
Drill Center - 3	Sep-22-2018	10:42	1181	Octocorallia	Duva sp.	2	10-20	good	sand	
Drill Center - 3	Sep-22-2018	10:46	1181	Octocorallia	Duva sp.	2	25-30	good	sand	
Drill Center - 3	Sep-22-2018	10:57	1181	Octocorallia	Duva sp.	10	10-20	good	sand	
Drill Center - 3	Sep-22-2018	11:03	1181	Octocorallia	Duva sp.	3	25	good	sand	
Drill Center - 3	Sep-22-2018	11:03	1181	Octocorallia	Duva sp.	5	15	good	sand	
Drill Center - 3	Sep-22-2018	11:05	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center - 3	Sep-22-2018	11:05	1181	Octocorallia	Duva sp.	2	10-15	good	sand	
Drill Center - 3	Sep-22-2018	11:05	1181	Octocorallia	Acanella	1	10	good	sand	
Drill Center - 3	Sep-22-2018	11:09	1181	Octocorallia	Duva sp.	10	10-25	good	rock	unidentified sponge (1) 30 cm
Drill Center - 3	Sep-22-2018	11:13	1181	Octocorallia	Duva sp.	1	25	good	sand	
Drill Center - 3	Sep-22-2018	11:14	1181	Octocorallia	Duva sp.	1	25	good	sand	
Drill Center - 3	Sep-22-2018	11:16	1181	Octocorallia	Acanella	1	20	good	sand	
Drill Center - 3	Sep-22-2018	11:16	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center - 3	Sep-22-2018	11:18	1181	Octocorallia	Duva sp.	1	20	good	sand	Fish
Drill Center - 3	Sep-22-2018	11:21	1181	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center - 3	Sep-22-2018	11:23	1181	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center - 3	Sep-22-2018	11:25	1181	Octocorallia	Duva sp.	2	10-20	good	sand	

Drill Center - 3	Sep-22-2018	11:25	1181	Octocorallia	sea pen	1	N/A	good	sand	
Drill Center - 3	Sep-22-2018	11:29	1181	Octocorallia	Duva sp.	8	15	good	rock	
Drill Center - 3	Sep-22-2018	11:31	1181	Octocorallia	Duva sp.	5	15-20	good	rock	sponge good photo just after Obs 61
Drill Center - 4	Sep-22-2018	12:10	1181	Octocorallia	Duva sp.	6	15-30	good	rock	
Drill Center - 4	Sep-22-2018	12:12	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -4	Sep-22-2018	12:16	1181	Octocorallia	Duva sp.	2	15-20	good	sand	
Drill Center -4	Sep-22-2018	12:16	1181	Octocorallia	Duva sp.	5	10	good	sand	
Drill Center -4	Sep-22-2018	12:17	1181	Octocorallia	Halipteris	1	35	good	sand	
Drill Center -4	Sep-22-2018	12:19	1181	Octocorallia	Duva sp.	9	15-30	good	Rock	(2) polymastia sponges 5cm
Drill Center -4	Sep-22-2018	12:21	1181	porifera	Sponge	1	20	poor	Sand	Fix not taken
Drill Center -4	Sep-22-2018	12:23	1181	Octocorallia	Duva sp.	2	20	good	sand	Good example of colour difference
Drill Center -4	Sep-22-2018	12:24	1181	Octocorallia	Duva sp.	4	15-25	good	rock/sand	Good sea star or anemone
Drill Center -4	Sep-22-2018	12:26	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -4	Sep-22-2018	12:26	1182	Octocorallia	Gersemia sp.	1	10	good	sand	polymastia and anemone
Drill Center -4	Sep-22-2018	12:28	1183	Octocorallia	Duva sp.	1	30	good	sand	
Drill Center -4	Sep-22-2018	12:32	1184	Octocorallia	Duva sp.	1	25	good	rock	
Drill Center -4	Sep-22-2018	12:34	1185	Octocorallia	Nephtheidae	3	5 - 10	good	rock	polymastia 5cm
Drill Center -4	Sep-22-2018	12:34	1186	Octocorallia	Gersemia sp.	1	25	good	rock	unidentified sponge 30 cm (1)
Drill Center -4	Sep-22-2018	12:36	1181	Octocorallia	Duva sp.	1	10	good	sand	Good squid photo after obs 74 12:36
Drill Center -4	Sep-22-2018	12:36	1181	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -4	Sep-22-2018	12:38	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -4	Sep-22-2018	12:39	1180	Octocorallia	Duva sp.	4	15	good	sand	polymastia sponge 15 cm (1) , squid after obs 75c
Drill Center -4	Sep-22-2018	12:42	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -4	Sep-22-2018	12:42	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -4	Sep-22-2018	12:42	1180	Octocorallia	Duva sp.	2	10-20	good	sand	
Drill Center -4	Sep-22-2018	12:43	1181	Octocorallia	Duva sp.	2	25	good	rock	
Drill Center -4	Sep-22-2018	12:43	1181	Octocorallia	Acanella	1	20	poor	sand	set of branches are bleaching and dying

Drill Center -5	Sep-22-2018	12:49	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -5	Sep-22-2018	12:49	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -5	Sep-22-2018	12:51	1180	Octocorallia	Duva sp.	5	20-30	good	sand	
Drill Center -5	Sep-22-2018	12:51	1180	Octocorallia	Duva sp.	5	20	good	sand	
Drill Center -5	Sep-22-2018	12:53	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -5	Sep-22-2018	12:53	1180	Octocorallia	Duva sp.	2	30	good	sand	
Drill Center -5	Sep-22-2018	12:57	1180	Octocorallia	Duva sp.	8	10-20	good	rock	good photo of fish after 80b
Drill Center -5	Sep-22-2018	12:58	1180	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center -5	Sep-22-2018	13:01	1180	Octocorallia	Duva sp.	1	40	dead	sand	
Drill Center -5	Sep-22-2018	13:04	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -5	Sep-22-2018	13:05	1180	Octocorallia	Duva sp.	7	10-25	good	sand	
Drill Center -5	Sep-22-2018	13:05	1180	Octocorallia	Gersemia sp.	1	25	good	sand	
Drill Center -5	Sep-22-2018	13:07	1180	Octocorallia	Duva sp.	3	20	good	sand	3 colours purple dark clear white
Drill Center -5	Sep-22-2018	13:07	1180	Octocorallia	Gersemia sp.	1	10	good	sand	
Drill Center -5	Sep-22-2018	13:08	1180	Octocorallia	Duva sp.	30	20	good	rock	
Drill Center -5	Sep-22-2018	13:11	1180	Octocorallia	Duva sp.	4	15-25	good	sand	also sea pen (4) and sea star
Drill Center -5	Sep-22-2018	13:16	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -5	Sep-22-2018	13:17	1180	Octocorallia	Duva sp.	5	25-30	good	rock	
Drill Center -5	Sep-22-2018	13:21	1180	Octocorallia	Duva sp.	2	5-10	good	rock	
Drill Center -5	Sep-22-2018	13:21	1180	Porifera	Polymastia sp.	1	5	good	sand	
Drill Center -5	Sep-22-2018	13:22	1180	Octocorallia	Acanella	1	15	good	sand	
Drill Center -5	Sep-22-2018	13:22	1180	Octocorallia	Duva sp.	1	15	good	sand	brittle star
Drill Center -5	Sep-22-2018	13:24	1180	Octocorallia	Duva sp.	2	20-25	good	sand	purple in colour, ends are darker
Drill Center -5	Sep-22-2018	13:25	1180	Octocorallia	Acanella	1	10	good	sand	
Drill Center -5	Sep-22-2018	13:26	1180	Octocorallia	Duva sp.	6	10-15	good	sand	Sponge in among. White ball like looks soft
Drill Center -5	Sep-22-2018	13:28	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -5	Sep-22-2018	13:29	1180	Octocorallia	Duva sp.	2	5	good	sand	

Drill Center -5	Sep-22-2018	13:31	1180	porifera	unidentified	1	30	poor	sand	dead coral or sponge
Drill Center -5	Sep-22-2018	13:34	1180	Octocorallia	Acanella	1	20	good	sand	orange bushy
Drill Center -5	Sep-22-2018	13:32	1180	Octocorallia	Duva sp.	2	15	good	sand	branches dying
Drill Center -5	Sep-22-2018	13:34	1180	Octocorallia	Duva sp.	2	20-30	good	Rock	
Drill Center -5	Sep-22-2018	13:34	1180	porifera	sponge	1	30	good	Sand	White funnel shaped sponge
Drill Center -5	Sep-22-2018	13:38	1180	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center -5	Sep-22-2018	13:40	1180	Octocorallia	Duva sp.	25	5-25	good	rock/sand	
Drill Center -6	Sep-22-2018	14:00	1180	Octocorallia	Duva sp.	9	10-15	good	rock/sand	
Drill Center -6	Sep-22-2018	14:01	1180	Octocorallia	Duva sp.	3	10	good	sand	no fix
Drill Center -6	Sep-22-2018	14:03	1180	Octocorallia	Duva sp.	8	15-20	good	rock	
Drill Center -6	Sep-22-2018	14:05	1180	Octocorallia	Anthomastus grandifloras	2	5-10	good	rock	
Drill Center -6	Sep-22-2018	14:06	1180	Octocorallia	Duva sp.	8	10	good	rock	sea pen
Drill Center -6	Sep-22-2018	14:07	1180	Octocorallia	Duva sp.	5	15-30	good	sand	
Drill Center -6	Sep-22-2018	14:10	1180	Octocorallia	Duva sp.	10	10	good	rock	
Drill Center -6	Sep-22-2018	14:10	1180	Octocorallia	Duva sp.	3	15-20	good	sand	
Drill Center -6	Sep-22-2018	14:11	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -6	Sep-22-2018	14:12	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -6	Sep-22-2018	14:12	1180	Octocorallia	Duva sp.	5	10	good	rock	fish (red hake?) polymastia sponge
Drill Center -6	Sep-22-2018	14:18	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -6	Sep-22-2018	14:19	1180	Octocorallia	Acanella	1	10	good	sand	
Drill Center -6	Sep-22-2018	14:20	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -6	Sep-22-2018	14:22	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -6	Sep-22-2018	14:26	1180	Octocorallia	Duva sp.	5	15	good	rock	sea pen Halipteris
Drill Center -6	Sep-22-2018	14:27	1180	Octocorallia	Duva sp.	15	15-30	good	rock	
Drill Center -6	Sep-22-2018	14:29	1180	Octocorallia	Duva sp.	4	20	good	sand	
Drill Center -6	Sep-22-2018	14:38	1180	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center -6	Sep-22-2018	14:38	1180	Octocorallia	Halipteris	1	50	good	sand	

Drill Center -7	Sep-22-2018	14:58	1180	Octocorallia	Duva sp.	6	15	good	sand	One dead covered in sand
Drill Center -7	Sep-22-2018	15:01	1180	Octocorallia	Duva sp.	3	20	good	sand	
Drill Center -7	Sep-22-2018	15:03	1180	Octocorallia	Duva sp.	4	5	good	sand	
Drill Center -7	Sep-22-2018	15:04	1180	Octocorallia	Duva sp.	1	10	good	sand	no fix
Drill Center -7	Sep-22-2018	15:08	1180	Octocorallia	Duva sp.	3	10-25	good	sand	
Drill Center -7	Sep-22-2018	15:10	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -7	Sep-22-2018	15:10	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -7	Sep-22-2018	15:12	1180	Octocorallia	Duva sp.	6	30	good	rock	no fix
Drill Center -7	Sep-22-2018	15:14	1180	Octocorallia	Anthomastus grandifloras	2	20	good	rock	
Drill Center -7	Sep-22-2018	15:16	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -7	Sep-22-2018	15:21	1180	Octocorallia	Duva sp.	5	10-25	good	rock	also a sponge soft, yellow on a rock
Drill Center -7	Sep-22-2018	15:21	1180	porifera	sponge	1	30	good	sand	
Drill Center -7	Sep-22-2018	15:25	1180	Octocorallia	Duva sp.	2	30	good	sand	
Drill Center -7	Sep-22-2018	15:25	1180	Octocorallia	Gersemia sp.	1	15	good	sand	
Drill Center -7	Sep-22-2018	15:30	1180	Octocorallia			20	good	sand	no still
Drill Center -7	Sep-22-2018	15:35	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -7	Sep-22-2018	15:38	1180	Porifera	sponge	1	20	good	sand	Triangular fan shaped sponge
Drill Center -7	Sep-22-2018	15:38	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -7	Sep-22-2018	15:39	1180	Porifera	sponge	1	30	good	sand	Triangular fan shaped sponge
Drill Center -7	Sep-22-2018	15:48	1180	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center -7	Sep-22-2018	15:48	1180	Porifera	sponge	1	40	good	rock	multiple fan like sponge
Drill Center -8	Sep-22-2018	16:00	1180	Octocorallia	Duva sp.	5	10	good	sand	
Drill Center -8	Sep-22-2018	16:05	1180	Octocorallia	Duva sp.	1	20	good	sand	20 cm fan shaped sponge and polymastia
Drill Center -8	Sep-22-2018	16:07	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -8	Sep-22-2018	16:12	1180	Octocorallia	Acanella	1	15	good	sand	
Drill Center -8	Sep-22-2018	16:15	1180	Octocorallia	Acanella	1	15	poor	sand	some branches dying
Drill Center -8	Sep-22-2018	16:17	1180	Octocorallia	Duva sp.	3	15	good	Rock	

Drill Center -9	Sep-22-2018	16:25	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -9	Sep-22-2018	16:26	1180	Octocorallia	Duva sp.	1	5	good	sand	small
Drill Center -9	Sep-22-2018	16:27	1180	Octocorallia	Duva sp.	9	5-20	good	sand	
Drill Center -9	Sep-22-2018	16:27	1180	Octocorallia	Duva sp.	2	10	good	sand/shell	
Drill Center -9	Sep-22-2018	16:28	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -9	Sep-22-2018	16:31	1180	Octocorallia	Duva sp.	1	15	good	sand	white sponge and bryozoa
Drill Center -9	Sep-22-2018	16:34	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -9	Sep-22-2018	16:37	1180	Octocorallia	Acanella	2	20	good	sand	
Drill Center -9	Sep-22-2018	16:40	1180	Octocorallia	Acanella	5	20	good	sand	
Drill Center -9	Sep-22-2018	16:41	1180	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center -9	Sep-22-2018	16:43	1180	Octocorallia	Duva sp.	2	25	good	sand	
Drill Center -9	Sep-22-2018	16:45	1180	Octocorallia	Duva sp.	6	15-25	good	rock/sand	
Drill Center -9	Sep-22-2018	16:48	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -9	Sep-22-2018	16:49	1180	Octocorallia	Duva sp.	2	15-20	good	sand	
Drill Center -9	Sep-22-2018	16:49	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -9	Sep-22-2018	16:50	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -9	Sep-22-2018	16:51	1180	Porifera	sponge	1	30	good	sand	irregular, funnel, tall
Drill Center -9	Sep-22-2018	16:51	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -9	Sep-22-2018	16:55	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -9	Sep-22-2018	16:56	1180	Porifera	sponge	1	40	good	rock	Standing concave porous
Drill Center -9	Sep-22-2018	16:56	1180	Octocorallia	Duva sp.	1	10	good	rock	
Drill Center -9	Sep-22-2018	17:01	1180	Octocorallia	Duva sp.	2	10-30	good	sand	
Drill Center -9	Sep-22-2018	17:02	1180	Octocorallia	Duva sp.	3	30	good	sand	
Drill Center -9	Sep-22-2018	17:03	1180	Octocorallia	Duva sp.	3	5	good	sand	
Drill Center -9	Sep-22-2018	17:04	1180	Octocorallia	Duva sp.	8	20-30	good	sand	
Drill Center -9	Sep-22-2018	17:04	1180	Porifera	sponge	1	40	good	sand	
Drill Center -9	Sep-22-2018	17:04	1180	Octocorallia	Duva sp.	8	15-20	good	sand	

Drill Center -9	Sep-22-2018	17:06	1180	Octocorallia	Duva sp.	3	10-20	good	sand	
Drill Center -10	Sep-22-2018	17:10	1180	Octocorallia	Acanella	1	10	poor	sand	
Drill Center -10	Sep-22-2018	17:10	1180	porifera	sponge	1	40	good	sand	
Drill Center -10	Sep-22-2018	17:14	1180	Octocorallia	Duva sp.	5	10	good	sand	
Drill Center -10	Sep-22-2018	17:16	1180	Octocorallia	Duva sp.	6	15	good	rock	polymastia 15 cm (1) anemone
Drill Center -10	Sep-22-2018	17:18	1180	Octocorallia	Duva sp.	6	15	good	rock	
Drill Center -10	Sep-22-2018	17:20	1180	Octocorallia	Duva sp.	2	5-20	good	sand	
Drill Center -10	Sep-22-2018	17:21	1180	Octocorallia	Duva sp.	3	25	good	sand	
Drill Center -10	Sep-22-2018	17:23	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -10	Sep-22-2018	17:24	1180	Octocorallia	Duva sp.	2	5-20	good	sand	
Drill Center -10	Sep-22-2018	17:25	1180	Octocorallia	Duva sp.	2	5-10	good	sand	dead acanella
Drill Center -10	Sep-22-2018	17:26	1180	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center -10	Sep-22-2018	17:30	1180	Octocorallia	Duva sp.	7	15	good	sand	
Drill Center -10	Sep-22-2018	17:34	1180	Octocorallia	Duva sp.	7	15-25	good	rock	polymastia (1) 5 cm
Drill Center -10	Sep-22-2018	17:34	1180	Octocorallia	Gersemia sp.	1	5	good	sand	
Drill Center -11	Sep-22-2018	18:02	1180	Octocorallia	Duva sp.	5	15-20	good	rock/sand	
Drill Center -11	Sep-22-2018	18:08	1180	Octocorallia	Duva sp.	4	15	good	rock	polymastia 5cm (1)
Drill Center -11	Sep-22-2018	18:10	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -11	Sep-22-2018	18:16	1180	Octocorallia	Duva sp.	6	15-25	good	rock/sand	2 sea pens
Drill Center -11	Sep-22-2018	18:16	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -11	Sep-22-2018	18:20	1180	Octocorallia	Duva sp.	2	15	good	sand	anemone
Drill Center -11	Sep-22-2018	18:24	1180	Octocorallia	Duva sp.	1	10	good	sand	brittle star
Drill Center -11	Sep-22-2018	18:28	1180	Octocorallia	Halipteris	1	45	good	sand	
Drill Center -11	Sep-22-2018	18:28	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -11	Sep-22-2018	18:31	1180	Octocorallia	Duva sp.	1	30	good	sand	
Drill Center -11	Sep-22-2018	18:35	1180	Octocorallia	Duva sp.	6	10-30	good	sand	
Drill Center -11	Sep-22-2018	18:36	1180	Octocorallia	Duva sp.	2	15	good	sand	multiple sea pens

Drill Center -11	Sep-22-2018	18:38	1180	Octocorallia	Duva sp.	2	15-20	good	sand	
Drill Center -11	Sep-22-2018	18:38	1180	Porifera	sponge	1	30	good	sand	white funnel sponge
Drill Center -11	Sep-22-2018	18:40	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -12	Sep-22-2018	18:47	1180	Octocorallia	Duva sp.	4	20	good	rock	
Drill Center -12	Sep-22-2018	18:47	1180	Octocorallia	Duva sp.	3	10	good	sand	anemone
Drill Center -12	Sep-22-2018	18:54	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -12	Sep-22-2018	18:54	1180	Porifera	sponge	1	20	good	sand	white funnel sponge
Drill Center -12	Sep-22-2018	18:56	1180	Octocorallia	Duva sp.	5	15-20	good	sand	sea pen and anemone
Drill Center -12	Sep-22-2018	19:01	1180	Octocorallia	Anthomastus grandifloras	2	5	good	sand	
Drill Center -12	Sep-22-2018	19:01	1180	Octocorallia	Duva sp.	8	15-20	good	rock	
Drill Center -12	Sep-22-2018	19:08	1180	Octocorallia	Duva sp.	5	10	good	sand	sponge
Drill Center -12	Sep-22-2018	19:12	1180	Octocorallia	Duva sp.	4	5-15	good	rock	sponge
Drill Center -13	Sep-22-2018	19:18	1180	Octocorallia	Duva sp.	9	20	good	rock	various sponges
Drill Center -13	Sep-22-2018	19:21	1180	Octocorallia	Duva sp.	12	10-20	good	rock	
Drill Center -13	Sep-22-2018	19:24	1180	Octocorallia	Duva sp.	5	10-15	good	rock	sponge and anemone
Drill Center -13	Sep-22-2018	19:26	1180	Octocorallia	Duva sp.	9	10-30	good	sand	
Drill Center -13	Sep-22-2018	19:28	1180	Octocorallia	Duva sp.	3	10-20	good	sand	
Drill Center -13	Sep-22-2018	19:29	1180	Octocorallia	Duva sp.	1	20	good	sand	orange anemone
Drill Center -13	Sep-22-2018	19:31	1180	Octocorallia	Acanella	1	10	good	sand	sea pens
Drill Center -13	Sep-22-2018	19:33	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -13	Sep-22-2018	19:35	1180	Octocorallia	Duva sp.	8	10	good	sand	no fix
Drill Center -13	Sep-22-2018	19:38	1180	Octocorallia	Duva sp.	4	20	good	sand	
Drill Center -13	Sep-22-2018	19:40	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -13	Sep-22-2018	19:40	1180	Porifera	sponge	1	20	good	sand	vase shaped
Drill Center -13	Sep-22-2018	19:44	1180	Octocorallia	Duva sp.	1	25	good	sand	
Drill Center -13	Sep-22-2018	19:47	1180	Octocorallia	Duva sp.	8	10-20	good	sand	sponges wide shot
Drill Center -13	Sep-22-2018	19:50	1180	Octocorallia	Duva sp.	1	15	good	sand	

Drill Center -14	Sep-22-2018	20:02	1180	Octocorallia	Duva sp.	8	20-30	good	sand	
Drill Center -14	Sep-22-2018	20:02	1180	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center -14	Sep-22-2018	20:11	1180	Octocorallia	Acanella	1	15	good	sand	
Drill Center -14	Sep-22-2018	20:14	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -14	Sep-22-2018	20:14	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -14	Sep-22-2018	20:16	1180	Octocorallia	Duva sp.	8	10	good	sand	
Drill Center -14	Sep-22-2018	20:18	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -14	Sep-22-2018	20:19	1180	Porifera	sponge	1	30	good	sand	white fan shaped sponge
Drill Center -14	Sep-22-2018	20:21	1180	Octocorallia	Duva sp.	7	10	good	sand	
Drill Center -14	Sep-22-2018	20:21	1180	Porifera	sponge	1	30	unk	sand	
Drill Center -14	Sep-22-2018	20:23	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -14	Sep-22-2018	20:25	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -14	Sep-22-2018	20:25	1180	Octocorallia	Gersemia sp.	1	15	good	sand	
Drill Center -14	Sep-22-2018	20:27	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -15	Sep-22-2018	20:33	1180	Octocorallia	Duva sp.	4	15-20	good	sand	
Drill Center -15	Sep-22-2018	20:37	1180	Octocorallia	Duva sp.	20	5-25	good	rock	polymastia (3) 5cm
Drill Center -15	Sep-22-2018	20:47	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -15	Sep-22-2018	20:47	1180	Octocorallia	Duva sp.	5	15	good	sand	Wolfish at 20:44
Drill Center -15	Sep-22-2018	20:49	1180	Octocorallia	Duva sp.	3	20-25	good	rock/sand	
Drill Center -15	Sep-22-2018	20:49	1180	Octocorallia	Duva sp.	10	5-25	good	rock	
Drill Center -15	Sep-22-2018	20:52	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -15	Sep-22-2018	20:53	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -15	Sep-22-2018	20:55	1180	Octocorallia	Duva sp.	11	20	good	rock/sand	
Drill Center -15	Sep-22-2018	20:55	1180	porifera	sponge	1	30	good	rock/sand	
Drill Center -15	Sep-22-2018	20:57	1180	Octocorallia	Duva sp.	7	15	good	rock/sand	
Drill Center -15	Sep-22-2018	20:58	1180	Octocorallia	Duva sp.	4	20	good	rock	
Drill Center -15	Sep-22-2018	20:59	1180	Octocorallia	Duva sp.	10	20	good	rock/sand	

Drill Center -15	Sep-22-2018	20:59	1180	Porifera	sponge	1	25	good	rock/sand	
Drill Center -15	Sep-22-2018	21:00	1180	Octocorallia	Duva sp.	8-10	20	good	rock	
Drill Center -15	Sep-22-2018	21:00	1180	Porifera	sponge	1	30	good	rock	
Drill Center -15	Sep-22-2018	21:02	1180	Octocorallia	Duva sp.	3	20-40	good	sand	
Drill Center -15	Sep-22-2018	21:03	1180	Octocorallia	Duva sp.	2	10-20	good	sand	
Drill Center -16	Sep-22-2018	21:10	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -16	Sep-22-2018	21:11	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -16	Sep-22-2018	21:11	1180	Octocorallia	Acanella	1	5	poor	sand	
Drill Center -16	Sep-22-2018	21:15	1180	Octocorallia	Duva sp.	5	15	good	sand	
Drill Center -16	Sep-22-2018	21:15	1180	Porifera	sponge	1	30	good	sand	white sponge fragmented
Drill Center -16	Sep-22-2018	21:17	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -16	Sep-22-2018	21:19	1180	Octocorallia	Duva sp.	4	10-15	good	sand	orange anemone
Drill Center -16	Sep-22-2018	21:21	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -16	Sep-22-2018	21:22	1180	Octocorallia	Duva sp.	6	10	good	sand	
Drill Center -16	Sep-22-2018	21:25	1180	Octocorallia	Duva sp.	5	5-20	good	rock	yellow sponge
Drill Center -16	Sep-22-2018	21:28	1180	Octocorallia	Duva sp.	2	10-20	good	rock	
Drill Center -16	Sep-22-2018	21:30	1180	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center -16	Sep-22-2018	21:32	1180	Octocorallia	Duva sp.	5	15-20	good	rock	sponge and anemone
Drill Center -17	Sep-22-2018	21:40	1180	Octocorallia	Duva sp.	5	20	good	sand	
Drill Center -17	Sep-22-2018	21:40	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -17	Sep-22-2018	21:41	1180	Octocorallia	Duva sp.	7	10-20	good	rock	
Drill Center -17	Sep-22-2018	21:44	1180	Octocorallia	Duva sp.	5	10-15	good	rock/sand	
Drill Center -17	Sep-22-2018	21:44	1180	Octocorallia	Acanella	1	20	good	rock/sand	
Drill Center -17	Sep-22-2018	21:46	1180	Octocorallia	Duva sp.	10	5-15	good	sand	
Drill Center -17	Sep-22-2018	21:47	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -17	Sep-22-2018	21:48	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -17	Sep-22-2018	21:51	1180	Octocorallia	Duva sp.	4	15	good	sand	

Drill Center -17	Sep-22-2018	21:53	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -17	Sep-22-2018	21:54	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -17	Sep-22-2018	21:56	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -17	Sep-22-2018	21:56	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -18	Sep-22-2018	22:13	1180	Octocorallia	Duva sp.	8	10	good	sand	
Drill Center -18	Sep-22-2018	22:13	1180	Porifera	Polymastia sp.	1	5	good	sand	
Drill Center -18	Sep-22-2018	22:19	1180	Octocorallia	Anthomastus grandifloras	10	5	good	sand	
Drill Center -18	Sep-22-2018	22:20	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -18	Sep-22-2018	22:23	1180	Octocorallia	Duva sp.	4	15	good	rock	anemone looks like se star
Drill Center -18	Sep-22-2018	22:26	1180	Porifera	sponge	1	30	dead	sand	
Drill Center -18	Sep-22-2018	22:26	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -18	Sep-22-2018	22:50	1180	Octocorallia	Duva sp.	15	5-10	good	sand	
Drill Center -18	Sep-22-2018	22:34	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -18	Sep-22-2018	22:37	1180	porifera	sponge	1	30	good	rock	
Drill Center -18	Sep-22-2018	22:37	1180	Octocorallia	Duva sp.	5	10	good	rock	
Drill Center -18	Sep-22-2018	22:39	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -18	Sep-22-2018	22:42	1180	Octocorallia	Duva sp.	6	15	good	sand	
Drill Center -18	Sep-22-2018	22:47	1180	Octocorallia	Duva sp.	3	N/A	good	rock	no snap shot
Drill Center -18	Sep-22-2018	22:50	1180	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center -19	Sep-22-2018	23:01	1180	Octocorallia	Duva sp.	3	25	good	sand	
Drill Center -19	Sep-22-2018	23:01	1180	Porifera	sponge	1	25	good	sand	
Drill Center -19	Sep-22-2018	23:03	1180	Octocorallia	Duva sp.	na	na	good	rock	no photo
Drill Center -19	Sep-22-2018	23:15	1180	Octocorallia	Duva sp.	6	10-15	good	rock	poor visibility
Drill Center -19	Sep-22-2018	23:15	1180	Porifera	Polymastia sp.	1	15	good	rock	
Drill Center -19	Sep-22-2018	23:16	1180	Octocorallia	Acanella	1	10	good	sand	
Drill Center -19	Sep-22-2018	23:20	1180	Octocorallia	Duva sp.	8	15	good	rock	
Drill Center -19	Sep-22-2018	23:23	1180	Octocorallia	Duva sp.	2	15	good	sand	

Drill Center -19	Sep-22-2018	23:28	1180	Octocorallia	Duva sp.	20	10	good	rock/sand	
Drill Center -19	Sep-22-2018	23:32	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -19	Sep-22-2018	23:36	1180	Octocorallia	Duva sp.	3	15	good	sand	sea pen
Drill Center -19	Sep-22-2018	23:38	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -19	Sep-22-2018	23:39	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -20	Sep-23-2018	0:07	1180	Porifera	sponge	1	15	good	sand	white pourous
Drill Center -20	Sep-23-2018	0:10	1180	Octocorallia	Duva sp.	10	20	good	rock/sand	
Drill Center -20	Sep-23-2018	0:10	1180	Porifera	sponge	1	30	good	rock/sand	
Drill Center -20	Sep-23-2018	0:12	1180	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center -20	Sep-23-2018	0:14	1180	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center -20	Sep-23-2018	0:15	1180	Octocorallia	Duva sp.	7	10	good	rock	sponge
Drill Center -20	Sep-23-2018	0:18	1180	Octocorallia	Duva sp.	2	25	good	rock	
Drill Center -20	Sep-23-2018	0:18	1180	Octocorallia	Duva sp.	1	5	good	rock	
Drill Center -20	Sep-23-2018	0:19	1180	Octocorallia	Duva sp.	3	15-30	good	rock	
Drill Center -20	Sep-23-2018	0:19	1180	Octocorallia	Duva sp.	6	15	good	rock	
Drill Center -20	Sep-23-2018	0:19	1180	Porifera	sponge	1	5	good	rock	
Drill Center -20	Sep-23-2018	0:20	1180	Octocorallia	Duva sp.	2	30	good	sand	1 sponge
Drill Center -20	Sep-23-2018	0:22	1180	Octocorallia	Duva sp.	15	10-30	good	rock	sponge
Drill Center -20	Sep-23-2018	0:25	1180	Octocorallia	Gersemia sp.	2	10	good	sand	white polyp
Drill Center -20	Sep-23-2018	0:26	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -20	Sep-23-2018	0:26	1180	Porifera	sponge	1	25	good	sand	funnel looking sponge
Drill Center -20	Sep-23-2018	0:27	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -20	Sep-23-2018	0:28	1180	Octocorallia	Duva sp.	10	15	good	rock	
Drill Center -20	Sep-23-2018	0:28	1180	Porifera	Polymastia sp.	1	10	good	rock	
Drill Center -20	Sep-23-2018	0:30	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -20	Sep-23-2018	0:30	1180	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center -20	Sep-23-2018	0:33	1180	Octocorallia	Duva sp.	8	15	good	rock	

Drill Center -20	Sep-23-2018	0:34	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -20	Sep-23-2018	0:35	1180	Octocorallia	Duva sp.	3	15-25	good	rock	
Drill Center -20	Sep-23-2018	0:35	1180	Octocorallia	Duva sp.	7	20-25	good	rock	
Drill Center -20	Sep-23-2018	0:35	1180	Octocorallia	Duva sp.	2	5-10	good	sand	
Drill Center -21	Sep-23-2018	0:38	1180	Octocorallia	Duva sp.	11	15-20	good	rock	
Drill Center -21	Sep-23-2018	0:38	1180	Octocorallia	Duva sp.	4	10	good	rock	
Drill Center -21	Sep-23-2018	0:40	1180	Octocorallia	Duva sp.	3	10-15	good	rock	
Drill Center -21	Sep-23-2018	0:40	1180	Octocorallia	Duva sp.	4	10-15	good	rock	
Drill Center -21	Sep-23-2018	0:41	1180	Octocorallia	Duva sp.	3	10-15	good	sand	
Drill Center -21	Sep-23-2018	0:43	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -21	Sep-23-2018	0:44	1180	Octocorallia	Duva sp.	4	20	good	rock	sponge on rock
Drill Center -21	Sep-23-2018	0:44	1180	Octocorallia	Gersemia sp.	1	5	good	rock	
Drill Center -21	Sep-23-2018	0:46	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -21	Sep-23-2018	0:47	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -21	Sep-23-2018	0:47	1180	Octocorallia	Duva sp.	6	20	good	sand	
Drill Center -21	Sep-23-2018	0:49	1180	Porifera	sponge	10	20	poor	sand	
Drill Center -21	Sep-23-2018	0:50	1180	Octocorallia	Duva sp.	4	20	good	rock	
Drill Center -21	Sep-23-2018	0:52	1180	Octocorallia	Duva sp.	3	20	good	rock	
Drill Center -21	Sep-23-2018	0:52	1180	Octocorallia	Duva sp.	2	20	good	rock	
Drill Center -21	Sep-23-2018	0:52	1180	Porifera	sponge	1	40	good	rock	
Drill Center -21	Sep-23-2018	0:53	1180	Octocorallia	Duva sp.	7	15	good	sand	sponge
Drill Center -21	Sep-23-2018	0:54	1180	Octocorallia	Duva sp.	5	15	good	sand	
Drill Center -21	Sep-23-2018	0:56	1180	Octocorallia	Duva sp.	6	10	good	sand	
Drill Center -21	Sep-23-2018	0:58	1180	Octocorallia	Duva sp.	6	5	good	rock/sand	
Drill Center -21	Sep-23-2018	0:58	1180	Octocorallia	Duva sp.	11	10-15	good	rock/sand	
Drill Center -21	Sep-23-2018	0:58	1180	Octocorallia	Duva sp.	8	15-20	good	rock	
Drill Center -21	Sep-23-2018	1:00	1180	Octocorallia	Duva sp.	8	15	good	rock	

Drill Center -21	Sep-23-2018	1:00	1180	Porifera	sponge	1	30	good	rock	fan shaped pourous
Drill Center -21	Sep-23-2018	1:06	1180	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center -21	Sep-23-2018	1:08	1180	Octocorallia	Duva sp.	8	20	good	rock	sponge
Drill Center -21	Sep-23-2018	1:09	1180	Octocorallia	Duva sp.	4	25	good	rock	
Drill Center -21	Sep-23-2018	1:09	1180	Porifera	sponge	1	30	good	rock	fan sponge
Drill Center -22	Sep-23-2018	1:17	1180	Octocorallia	Duva sp.	8	10	good	rock	
Drill Center -22	Sep-23-2018	1:17	1180	Porifera	Polymastia sp.	10	5-10	good	rock	
Drill Center -22	Sep-23-2018	1:19	1180	Octocorallia	Duva sp.	8	15	good	rock	2 sponges
Drill Center -22	Sep-23-2018	1:20	1180	Octocorallia	Duva sp.	18	20	good	rock	
Drill Center -22	Sep-23-2018	1:22	1180	Octocorallia	Duva sp.	15	5-30	good	rock	
Drill Center -22	Sep-23-2018	1:22	1180	Octocorallia	Duva sp.	6	15	good	rock	
Drill Center -22	Sep-23-2018	1:22	1180	Octocorallia	Acanella	1	10	good	rock	
Drill Center -22	Sep-23-2018	1:25	1180	Octocorallia	Duva sp.	1	10	good	sand	sea pen
Drill Center -22	Sep-23-2018	1:25	1180	Octocorallia	Duva sp.	2	10	good	sand	sea pen
Drill Center -22	Sep-23-2018	1:27	1180	Porifera	Asconema foliata	1	10	good	sand	funnel tube
Drill Center -22	Sep-23-2018	1:27	1180	Octocorallia	Duva sp.	8	20	good	rock	
Drill Center -22	Sep-23-2018	1:29	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -22	Sep-23-2018	1:31	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -22	Sep-23-2018	1:32	1180	Octocorallia	Duva sp.	6	10	good	rock	sea pen
Drill Center -22	Sep-23-2018	1:33	1180	Octocorallia	Duva sp.	10	10	good	rock	
Drill Center -22	Sep-23-2018	1:33	1180	Porifera	sponge	1	10	good	rock	yellow sponge
Drill Center -22	Sep-23-2018	1:36	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -22	Sep-23-2018	1:37	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -22	Sep-23-2018	1:38	1180	Porifera	sponge	1	15	good	sand	
Drill Center -22	Sep-23-2018	1:40	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -22	Sep-23-2018	1:42	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -22	Sep-23-2018	1:42	1180	Porifera	Polymastia sp.	1	5	good	sand	

Drill Center -22	Sep-23-2018	1:43	1180	Porifera	sponge	1	20	poor	sand	looks flat and pourous
Drill Center -22	Sep-23-2018	1:45	1180	Octocorallia	Duva sp.	3	15	good	rock	
Drill Center -22	Sep-23-2018	1:45	1180	Octocorallia	Duva sp.	3	15	good	rock	
Drill Center -23	Sep-23-2018	1:54	1180	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center -23	Sep-23-2018	1:54	1180	Octocorallia	acanella	1	5	good	sand	
Drill Center -23	Sep-23-2018	1:54	1180	Octocorallia	Duva sp.	1	15	good	sand	looks like it is dead
Drill Center -23	Sep-23-2018	1:55	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -23	Sep-23-2018	1:55	1180	Octocorallia	Gersemia sp.	1	15	good	sand	
Drill Center -23	Sep-23-2018	1:56	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -23	Sep-23-2018	1:56	1180	porifera	sponge	2	15	good	sand	
Drill Center -23	Sep-23-2018	1:57	1180	Octocorallia	Duva sp.	1	15	good	rock	
Drill Center -23	Sep-23-2018	1:57	1180	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center -23	Sep-23-2018	1:58	1180	Octocorallia	Duva sp.	8	15-20	good	sand	
Drill Center -23	Sep-23-2018	2:01	1180	Octocorallia	Duva sp.	10	20	good	rock	
Drill Center -23	Sep-23-2018	2:04	1180	Octocorallia	Gersemia sp.	1	5	good	sand	
Drill Center -23	Sep-23-2018	2:05	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -23	Sep-23-2018	2:06	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -23	Sep-23-2018	2:07	1180	Octocorallia	Duva sp.	1	5	good	rock	
Drill Center -23	Sep-23-2018	2:08	1180	Octocorallia	Duva sp.	6	15	good	sand	
Drill Center -23	Sep-23-2018	2:10	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -23	Sep-23-2018	2:10	1180	Octocorallia	Duva sp.	3	15	good	rock	
Drill Center -23	Sep-23-2018	2:13	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -23	Sep-23-2018	2:13	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -23	Sep-23-2018	2:14	1180	Octocorallia	Duva sp.	6	15-20	good	sand	
Drill Center -23	Sep-23-2018	2:15	1180	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center -23	Sep-23-2018	2:16	1180	Octocorallia	Duva sp.	5	15	good	rock	
Drill Center -23	Sep-23-2018	2:16	1180	Porifera	sponge	1	15	good	rock	large pourous

Drill Center -23	Sep-23-2018	2:18	1180	Octocorallia	Duva sp.	6	20	good	rock	
Drill Center -23	Sep-23-2018	2:19	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -23	Sep-23-2018	2:20	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -24	Sep-23-2018	2:32	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -24	Sep-23-2018	2:33	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -24	Sep-23-2018	2:35	1180	Octocorallia	Duva sp.	10	20	good	sand	
Drill Center -24	Sep-23-2018	2:35	1180	Octocorallia	Acanella	1	15	poor	sand	
Drill Center -24	Sep-23-2018	2:35	1180	Anthozoa	Acanthogorgia armata	1	15	good	sand	
Drill Center -24	Sep-23-2018	2:38	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -24	Sep-23-2018	2:39	1180	Octocorallia	Duva sp.	6	15-20	good	rock	
Drill Center -24	Sep-23-2018	2:39	1180	Porifera	sponge	1	10	good	rock	
Drill Center -24	Sep-23-2018	2:39	1180	Porifera	Polymastia sp.	2	5	good	rock	
Drill Center -24	Sep-23-2018	2:40	1180	Octocorallia	Duva sp.	1	20	good	sand	anemone
Drill Center -24	Sep-23-2018	2:41	1180	Octocorallia	Duva sp.	6	5-10	good	rock	sea pen
Drill Center -24	Sep-23-2018	2:42	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -24	Sep-23-2018	2:44	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -24	Sep-23-2018	2:45	1180	Octocorallia	Duva sp.	8	20-25	good	sand	
Drill Center -24	Sep-23-2018	2:45	1180	Octocorallia	Gersemia sp.	1	10	good	rock	
Drill Center -24	Sep-23-2018	2:45	1180	Porifera	sponge	1	10	good	rock	
Drill Center -24	Sep-23-2018	2:48	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -24	Sep-23-2018	2:49	1180	Octocorallia	Duva sp.	10	15-20	good	rock	
Drill Center -24	Sep-23-2018	2:49	1180	Octocorallia	Gersemia sp.	2	10	good	rock	
Drill Center -24	Sep-23-2018	2:51	1180	Octocorallia	Acanella	1	15	good	sand	
Drill Center -24	Sep-23-2018	2:52	1180	Octocorallia	Duva sp.	3	15	good	sand/shell	on sponge and anemone
Drill Center -24	Sep-23-2018	2:54	1180	Octocorallia	Duva sp.	1	10-15	good	sand	
Drill Center -24	Sep-23-2018	2:56	1180	Octocorallia	Duva sp.	4	15	good	rock	360 b hydroid
Drill Center -24	Sep-23-2018	2:56	1180	Porifera	white sponge	1	5	good	rock	

Drill Center -24	Sep-23-2018	2:58	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -25	Sep-23-2018	3:02	1180	Octocorallia	Duva sp.	6	30	good	rock	
Drill Center -25	Sep-23-2018	3:02	1180	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center -25	Sep-23-2018	3:04	1180	Octocorallia	Duva sp.	6	10	good	sand	anemone, sea urchin
Drill Center -25	Sep-23-2018	3:04	1180	Octocorallia	Gersemia sp.	1	5	good	sand	
Drill Center -25	Sep-23-2018	3:04	1180	Porifera	sponge	1	30	good	sand	
Drill Center -25	Sep-23-2018	3:12	1180	Octocorallia	Duva sp.	2	10-15	good	sand	
Drill Center -25	Sep-23-2018	3:13	1180	Octocorallia	Duva sp.	1	5-10	good	sand	
Drill Center -25	Sep-23-2018	3:14	1180	Octocorallia	Duva sp.	3	5-10	good	sand	
Drill Center -25	Sep-23-2018	3:17	1180	Octocorallia	Duva sp.	1	5-10	good	sand	
Drill Center -25	Sep-23-2018	3:19	1180	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center -25	Sep-23-2018	3:19	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -25	Sep-23-2018	3:19	1180	Octocorallia	Acanella	1	5-10	good	sand	
Drill Center -25	Sep-23-2018	3:20	1180	Octocorallia	Duva sp.	10	15-20	good	rock	
Drill Center -25	Sep-23-2018	3:22	1180	Octocorallia	Duva sp.	1	20	good	rock	
Drill Center -25	Sep-23-2018	3:23	1180	Octocorallia	Duva sp.	10	20	good	rock	
Drill Center -25	Sep-23-2018	3:23	1180	Porifera	sponge	2	10	good	rock	
Drill Center -25	Sep-23-2018	3:23	1180	Octocorallia	Duva sp.	4	15-20	good	rock	
Drill Center -25	Sep-23-2018	3:25	1180	Octocorallia	Duva sp.	6	15	good	rock	
Drill Center -26	Sep-23-2018	3:38	1180	Octocorallia	Duva sp.	16	15	good	rock/sand	
Drill Center -26	Sep-23-2018	3:41	1180	Octocorallia	Duva sp.	2	10	good	rock	
Drill Center -26	Sep-23-2018	3:47	1180	Octocorallia	Duva sp.	4	10-15	good	sand	
Drill Center -26	Sep-23-2018	3:48	1180	Octocorallia	Duva sp.	7	15	good	sand	Sponge has shrimp in it
Drill Center -26	Sep-23-2018	3:48	1180	Porifera	sponge	1	30	good	sand	sponge is ball shaped
Drill Center -26	Sep-23-2018	3:50	1180	Octocorallia	Duva sp.	2	5	good	rock	
Drill Center -26	Sep-23-2018	3:50	1180	Porifera	Polymastia sp.	1	10	good	rock	sponge ball with tubules
Drill Center -26	Sep-23-2018	3:51	1180	Octocorallia	Duva sp.	2	20	good	sand	

Drill Center -26	Sep-23-2018	3:52	1180	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center -26	Sep-23-2018	3:56	1180	Octocorallia	Duva sp.	2	25	good	rock	
Drill Center -26	Sep-23-2018	3:56	1180	Porifera	sponge	1	10	good	rock	
Drill Center -26	Sep-23-2018	3:58	1180	Octocorallia	Acanella	1	5	good	sand	
Drill Center -26	Sep-23-2018	3:59	1180	Octocorallia	Duva sp.	4	10-25	good	rock	
Drill Center -26	Sep-23-2018	3:59	1180	Octocorallia	Gersemia sp.	1	10	good	rock	
Drill Center -26	Sep-23-2018	4:00	1180	Octocorallia	Duva sp.	10	15	good	sand	
Drill Center -26	Sep-23-2018	4:00	1180	Octocorallia	Gersemia sp.	1	10	good	sand	
Drill Center -26	Sep-23-2018	4:02	1180	Octocorallia	Duva sp.	3	10	ok	sand	underneath dead looking
Drill Center -26	Sep-23-2018	4:03	1180	Octocorallia	Duva sp.	7	15	good	rock/sand	
Drill Center -26	Sep-23-2018	4:03	1180	Porifera	Sponge	1	40	good	rock/sand	flat open
Drill Center -26	Sep-23-2018	4:03	1180	Octocorallia	Duva sp.	1	15	good	rock/sand	
Drill Center -26	Sep-23-2018	4:04	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -26	Sep-23-2018	4:06	1180	Octocorallia	Duva sp.	3	15-20	good	rock	
Drill Center -26	Sep-23-2018	4:06	1180	Porifera	Polymastia sp.	1	5	good	rock	sponge ball with tubules
Drill Center -27	Sep-23-2018	4:18	1180	Octocorallia	Duva sp.	5	10	good	rock	
Drill Center -27	Sep-23-2018	4:18	1180	Octocorallia	Acanella	1	10	good	rock	
Drill Center -27	Sep-23-2018	4:20	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -27	Sep-23-2018	4:22	1180	Porifera	sponge	1	30	good	sand	
Drill Center -27	Sep-23-2018	4:22	1180	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center -27	Sep-23-2018	4:22	1180	Octocorallia	Acanella	2	10	good	sand	
Drill Center -27	Sep-23-2018	4:26	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -27	Sep-23-2018	4:27	1180	Octocorallia	Duva sp.	1	5-10	good	sand	
Drill Center -27	Sep-23-2018	4:27	1180	Octocorallia	Duva sp.	3	10-15	good	sand	Sea Urchin
Drill Center -27	Sep-23-2018	4:27	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -27	Sep-23-2018	4:29	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -27	Sep-23-2018	4:31	1180	Octocorallia	Duva sp.	2	10-15	good	sand	

Drill Center -27	Sep-23-2018	4:32	1180	Octocorallia	Duva sp.	4	10	good	sand	
Drill Center -27	Sep-23-2018	4:35	1180	Octocorallia	Duva sp.	4	20	good	sand	
Drill Center -27	Sep-23-2018	4:36	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -27	Sep-23-2018	4:38	1180	Octocorallia	Duva sp.	3	20	good	sand	sponge sea pen
Drill Center -27	Sep-23-2018	4:39	1180	Porifera	sponge	1	50	good	sand	looks like a standing bowl
Drill Center -27	Sep-23-2018	4:39	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -27	Sep-23-2018	4:40	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -27	Sep-23-2018	4:40	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -27	Sep-23-2018	4:41	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -27	Sep-23-2018	4:41	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -27	Sep-23-2018	4:41	1180	Porifera	sponge	1	25	good	sand	
Drill Center -27	Sep-23-2018	4:42	1180	Octocorallia	Duva sp.	2	10	good	sand	Brittle star and fish
Drill Center -27	Sep-23-2018	4:44	1180	Octocorallia	Duva sp.	10	20	good	rock	ball sponge
Drill Center -27	Sep-23-2018	4:45	1180	Octocorallia	Gersemia sp.	1	10	good	sand	
Drill Center -27	Sep-23-2018	4:45	1180	Octocorallia	Acanella	1	10	good	sand	
Drill Center -28	Sep-23-2018	4:55	1180	Octocorallia	Duva sp.	8	10	good	rock	
Drill Center -28	Sep-23-2018	4:57	1180	Octocorallia	Duva sp.	6	10	good	rock/sand	
Drill Center -28	Sep-23-2018	4:58	1180	Octocorallia	Duva sp.	1	15	good	sand	polymastia 10cm (1)
Drill Center -28	Sep-23-2018	4:58	1180	Octocorallia	Gersemia sp.	1	10	good	sand	
Drill Center -28	Sep-23-2018	5:00	1180	Octocorallia	Duva sp.	2	5-10	good	sand	
Drill Center -28	Sep-23-2018	5:00	1180	Porifera	Sponge	1	60	good	sand	Bowl fan
Drill Center -28	Sep-23-2018	5:01	1180	Octocorallia	Duva sp.	10	15	good	rock	
Drill Center -28	Sep-23-2018	5:02	1180	Octocorallia	Duva sp.	2	10-15	good	sand	
Drill Center -28	Sep-23-2018	5:04	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -28	Sep-23-2018	5:07	1180	Octocorallia	Duva sp.	10	10-15	good	rock	white sponges
Drill Center -28	Sep-23-2018	5:08	1180	Octocorallia	Duva sp.	1	10	good	sand	Brittle star and grey squid
Drill Center -28	Sep-23-2018	5:09	1180	Octocorallia	Duva sp.	1	10	good	sand	looks like dead ones around it

Drill Center -28	Sep-23-2018	5:12	1180	Octocorallia	Gersemia sp.	1	10	good	sand	sea pen
Drill Center -28	Sep-23-2018	5:14	1180	Octocorallia	Duva sp.	7	15	good	sand	
Drill Center -29	Sep-23-2018	5:20	1180	Octocorallia	Duva sp.	3	20	good	sand	
Drill Center -29	Sep-23-2018	5:25	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -29	Sep-23-2018	5:27	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -29	Sep-23-2018	5:27	1180	Octocorallia	Duva sp.	6	10	good	rock	
Drill Center -29	Sep-23-2018	5:28	1180	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center -29	Sep-23-2018	5:29	1180	Octocorallia	Duva sp.	7	15	good	sand	
Drill Center -29	Sep-23-2018	5:29	1180	Octocorallia	Duva sp.	3	15-20	good	rock	
Drill Center -29	Sep-23-2018	5:31	1180	Octocorallia	Duva sp.	1	15	good	sand	sponge
Drill Center -29	Sep-23-2018	5:35	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -29	Sep-23-2018	5:36	1180	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center -29	Sep-23-2018	5:37	1180	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center -29	Sep-23-2018	5:37	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center -29	Sep-23-2018	5:38	1180	Porifera	sponge	3	n/a	good	rock	
Drill Center -29	Sep-23-2018	5:38	1180	Octocorallia	Duva sp.	3	5	good	rock	
Drill Center -29	Sep-23-2018	5:40	1180	Octocorallia	Duva sp.	4	30	good	sand	
Drill Center -29	Sep-23-2018	5:42	1180	Porifera	sponge	1	20	good	sand	white
Drill Center -29	Sep-23-2018	5:42	1180	Octocorallia	Duva sp.	3	15	good	sand	
Drill Center -29	Sep-23-2018	5:43	1180	Octocorallia	Duva sp.	8	15-25	good	rock	
Drill Center -29	Sep-23-2018	5:43	1180	Porifera	Polymastia sp.	1	15	good	sand	
Drill Center -29	Sep-23-2018	5:44	1180	Octocorallia	Duva sp.	4	20	good	sand	
Drill Center -29	Sep-23-2018	5:45	1180	Octocorallia	Duva sp.	2	20	good	sand	
Drill Center -29	Sep-23-2018	5:45	1180	Octocorallia	Duva sp.	3	15	good	rock	
Drill Center -29	Sep-23-2018	5:49	1180	Octocorallia	Duva sp.	2	20	good	sand	anemone
Drill Center -29	Sep-23-2018	5:50	1180	Octocorallia	Duva sp.	2	15	good	sand	
Drill Center -29	Sep-23-2018	5:51	1180	Octocorallia	Duva sp.	6	20	good	sand	

Drill Center -29	Sep-23-2018	5:53	1180	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	6:31	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	6:33	1181	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center - 30	Sep-23-2018	6:36	1181	Octocorallia	Duva sp.	2	35	good	rock	
Drill Center - 30	Sep-23-2018	6:37	1181	Octocorallia	Duva sp.	3	20	good	rock	
Drill Center - 30	Sep-23-2018	6:38	1181	Porifera	sponge	1	40	good	rock	
Drill Center - 30	Sep-23-2018	6:38	1181	Octocorallia	Duva sp.	3	20	good	rock	
Drill Center - 30	Sep-23-2018	6:40	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	6:40	1181	Octocorallia	Duva sp.	1	5	good	sand	
Drill Center - 30	Sep-23-2018	6:42	1181	Octocorallia	Duva sp.	2	20	good	rock	
Drill Center - 30	Sep-23-2018	6:44	1181	Porifera	sponge	1	40	good	sand	white fan-shaped sponge
Drill Center - 30	Sep-23-2018	6:46	1181	Octocorallia	Duva sp.	1	20	good	sand	sea pen Halipteris
Drill Center - 30	Sep-23-2018	6:47	1181	Octocorallia	Duva sp.	20	10-15	good	rock/sand	
Drill Center - 30	Sep-23-2018	6:48	1181	Octocorallia	Duva sp.	6	5-15	good	sand	
Drill Center - 30	Sep-23-2018	6:49	1181	Octocorallia	Duva sp.	8	5-10	good	rock	
Drill Center - 30	Sep-23-2018	6:50	1181	Octocorallia	Duva sp.	2	5	good	sand	
Drill Center - 30	Sep-23-2018	6:51	1181	Octocorallia	Duva sp.	8	5-15	good	sand	
Drill Center - 30	Sep-23-2018	6:53	1181	Octocorallia	Duva sp.	7	5-10	good	rock	
Drill Center - 30	Sep-23-2018	6:55	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	6:56	1181	Octocorallia	Duva sp.	4	5-10	good	sand	
Drill Center - 30	Sep-23-2018	6:57	1181	Octocorallia	Duva sp.	3	5	good	sand	
Drill Center - 30	Sep-23-2018	7:01	1181	Octocorallia	Duva sp.	2	25	good	sand	
Drill Center - 30	Sep-23-2018	7:01	1181	Octocorallia	Duva sp.	10	5-15	good	sand	
Drill Center - 30	Sep-23-2018	7:03	1181	Octocorallia	Acanella	1	20	good	sand	
Drill Center - 30	Sep-23-2018	7:05	1181	Octocorallia	Duva sp.	1	35	good	sand	
Drill Center - 30	Sep-23-2018	7:07	1181	Octocorallia	Duva sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	7:09	1181	Octocorallia	Duva sp.	50	10-15	good	rock/sand	check abundance

Drill Center - 30	Sep-23-2018	7:14	1181	Octocorallia	Duva sp.	4	10-15	good	rock	
Drill Center - 30	Sep-23-2018	7:16	1181	Octocorallia	Duva sp.	15	20-25	good	rock	
Drill Center - 30	Sep-23-2018	7:19	1181	Porifera	sponge	1	35	poor	sand	
Drill Center - 30	Sep-23-2018	7:21	1181	Octocorallia	Duva sp.	6	15-25	good	rock	
Drill Center - 30	Sep-23-2018	7:26	1181	Octocorallia	Acanella	1	10	good	sand	
Drill Center - 30	Sep-23-2018	7:26	1181	Porifera	sponge	1	30	good	sand	
Drill Center - 30	Sep-23-2018	7:27	1181	Octocorallia	Duva sp.	1	15	good	sand	white sponge
Drill Center - 30	Sep-23-2018	7:28	1181	Octocorallia	Duva sp.	10	10	good	rock	
Drill Center - 30	Sep-23-2018	7:30	1181	Octocorallia	Duva sp.	3	20	good	rock	
Drill Center - 30	Sep-23-2018	7:32	1181	Octocorallia	Duva sp.	1	25	good	sand	
Drill Center - 30	Sep-23-2018	7:33	1181	Octocorallia	Duva sp.	5	25	good	rock	
Drill Center - 30	Sep-23-2018	7:35	1181	Octocorallia	Duva sp.	4	10	good	sand	
Drill Center - 30	Sep-23-2018	7:37	1181	Octocorallia	Duva sp.	3	10	good	sand	
Drill Center - 30	Sep-23-2018	7:38	1181	Octocorallia	Duva sp.	20	15	good	rock	basket star on coral
Drill Center - 30	Sep-23-2018	7:41	1181	Octocorallia	Acanella	2	5	good	sand	
Drill Center - 30	Sep-23-2018	7:42	1181	Octocorallia	Duva sp.	4	10	good	rock	
Drill Center - 30	Sep-23-2018	7:43	1181	Octocorallia	Duva sp.	6	20-30	good	rock	
Drill Center - 30	Sep-23-2018	7:43	1181	Octocorallia	Acanella	1	10	good	rock	
Drill Center - 30	Sep-23-2018	7:49	1181	Octocorallia	Duva sp.	6	15-20	good	sand	
Drill Center - 30	Sep-23-2018	7:52	1181	Octocorallia	Duva sp.	4	15	good	rock/sand	
Drill Center - 30	Sep-23-2018	7:53	1181	Octocorallia	Duva sp.	1	30	good	sand	
Drill Center - 30	Sep-23-2018	7:53	1181	Desmospongia	Polymastia sp.	1	10	good	sand	
Drill Center - 30	Sep-23-2018	7:54	1181	Octocorallia	Duva sp.	2	10	good	sand	
Drill Center - 30	Sep-23-2018	7:55	1181	Octocorallia	Duva sp.	1	20	good	sand	
Drill Center - 30	Sep-23-2018	7:59	1181	Octocorallia	Duva sp.	4	15	good	sand	
Drill Center - 30	Sep-23-2018	8:01	1181	Octocorallia	Duva sp.	5	20	good	sand	
Drill Center - 30	Sep-23-2018	8:01	1181	Octocorallia	Gersemia sp.	1	10	good	sand	

Drill Center - 30	Sep-23-2018	8:05	1181	Octocorallia	Acanella	1	10	good	sand	
Drill Center - 30	Sep-23-2018	8:07	1181	Octocorallia	Duva sp.	5	20	good	rock	
Drill Center - 30	Sep-23-2018	8:07	1181	Desmospongiae	Polymastia sp.	3	5-10	good	rock	
Drill Center - 30	Sep-23-2018	8:10	1181	Octocorallia	Duva sp.	1	15	good	sand	
Drill Center - 30	Sep-23-2018	8:11	1181	Octocorallia	Duva sp.	4	10-15	good	rock	
Drill Center - 30	Sep-23-2018	8:12	1181	Octocorallia	Duva sp.	4	15	good	rock	
Drill Center - 30	Sep-23-2018	8:14	1181	Octocorallia	Duva sp.	4	15-20	good	rock/sand	
Drill Center - 30	Sep-23-2018	8:14	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 200m	Sep-23-2018	8:42	1181	Octocorallia	Duva sp.	4	15	good	rock	
Dispersal 200m	Sep-23-2018	8:44	1181	Octocorallia	Duva sp.	25	10-20	good	rock/sand	
Dispersal 200m	Sep-23-2018	8:47	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 200m	Sep-23-2018	8:47	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 200m	Sep-23-2018	8:48	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 200m	Sep-23-2018	8:49	1181	Octocorallia	Duva sp.	5	15-20	good	sand	
Dispersal 200m	Sep-23-2018	8:52	1181	Octocorallia	Duva sp.	5	5-15	good	sand	
Dispersal 200m	Sep-23-2018	8:54	1181	Octocorallia	Duva sp.	7	10	good	sand	
Dispersal 200m	Sep-23-2018	8:55	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 200m	Sep-23-2018	8:56	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 200m	Sep-23-2018	8:57	1181	Octocorallia	Duva sp.	5	15-20	good	sand	
Dispersal 200m	Sep-23-2018	8:57	1181	Porifera	sponge	1	40	good	sand	white, fan-shaped sponge
Dispersal 200m	Sep-23-2018	8:58	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 200m	Sep-23-2018	8:59	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 200m	Sep-23-2018	9:00	1181	Octocorallia	Duva sp.	15	5-10	good	sand	
Dispersal 200m	Sep-23-2018	9:02	1181	Octocorallia	Duva sp.	15	10-20	good	rock/sand	
Dispersal 200m	Sep-23-2018	9:03	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 200m	Sep-23-2018	9:04	1181	Octocorallia	Duva sp.	2	10-15	good	sand	
Dispersal 200m	Sep-23-2018	9:04	1181	Octocorallia	Duva sp.	3	10	good	sand	

Dispersal 200 m	Sep-23-2018	9:06	1181	Octocorallia	Duva sp.	4	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:10	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:10	1181	Octocorallia	Gersemia sp.	1	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:11	1181	Octocorallia	Duva sp.	9	10-15	good	rock	
Dispersal 200 m	Sep-23-2018	9:12	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 200 m	Sep-23-2018	9:13	1181	Porifera	sponge	1	50	good	sand	white, fan-shaped sponge
Dispersal 200 m	Sep-23-2018	9:15	1181	Octocorallia	Duva sp.	5	5	good	sand	
Dispersal 200 m	Sep-23-2018	9:16	1181	Porifera	sponge	1	30	good	sand	
Dispersal 200 m	Sep-23-2018	9:16	1181	Octocorallia	Duva sp.	8	25-30	good	sand	
Dispersal 200 m	Sep-23-2018	9:21	1181	Octocorallia	Acanella	1	5	poor	sand	
Dispersal 200 m	Sep-23-2018	9:23	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 200 m	Sep-23-2018	9:24	1181	Octocorallia	Duva sp.	7	5-10	good	sand	
Dispersal 200 m	Sep-23-2018	9:25	1181	Octocorallia	Duva sp.	3	20	good	sand	
Dispersal 200 m	Sep-23-2018	9:30	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:30	1181	Desmospongiae	Polymastia sp.	1	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:32	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 200 m	Sep-23-2018	9:33	1181	Octocorallia	Acanella	1	5	poor	sand	
Dispersal 200 m	Sep-23-2018	9:36	1181	Octocorallia	Duva sp.	5	10	good	sand	
Dispersal 200 m	Sep-23-2018	9:37	1181	Octocorallia	Duva sp.	3	10-15	good	sand	
Dispersal 200 m	Sep-23-2018	9:39	1181	Octocorallia	Duva sp.	3	5-15	good	sand	
Dispersal 200 m	Sep-23-2018	9:45	1181	Octocorallia	Duva sp.	2	15	good	rock	
Dispersal 200 m	Sep-23-2018	9:45	1181	Porifera	sponge	3	5	good	rock	
Dispersal 200 m	Sep-23-2018	9:50	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 200 m	Sep-23-2018	9:50	1181	Octocorallia	Duva sp.	6	25	good	rock	
Dispersal 200 m	Sep-23-2018	9:52	1181	Octocorallia	Duva sp.	6	5	good	rock	
Dispersal 200 m	Sep-23-2018	9:54	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 200 m	Sep-23-2018	9:55	1181	Octocorallia	Duva sp.	5	10	good	rock	

Dispersal 200 m	Sep-23-2018	9:57	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 200 m	Sep-23-2018	10:17	1181	Octocorallia	Duva sp.	9	5-10	good	rock	
Dispersal 200 m	Sep-23-2018	10:18	1181	Octocorallia	Duva sp.	4	5-10	good	rock	
Dispersal 200 m	Sep-23-2018	10:18	1181	Porifera	Polymastia sp.	1	15	good	rock	
Dispersal 200 m	Sep-23-2018	10:22	1181	Porifera	sponge	1	25	good	rock	
Dispersal 200 m	Sep-23-2018	10:22	1181	Octocorallia	Duva sp.	2	20	good	rock	
Dispersal 200 m	Sep-23-2018	10:24	1181	Octocorallia	Duva sp.	6	10-15	good	rock	
Dispersal 200 m	Sep-23-2018	10:25	1181	Porifera	sponge	2	50	good	rock	2 different species
Dispersal 200 m	Sep-23-2018	10:25	1181	Octocorallia	Duva sp.	4	5-10	good	rock	sea pens
Dispersal 200 m	Sep-23-2018	10:28	1181	Octocorallia	Duva sp.	5	10	good	sand	
Dispersal 200 m	Sep-23-2018	10:29	1181	Porifera	sponge	1	50	good	sand	
Dispersal 200 m	Sep-23-2018	10:29	1181	Desmospongiae	Polymastia sp.	1	20	good	sand	
Dispersal 200 m	Sep-23-2018	10:30	1181	Porifera	sponge	3	20-30	good	sand	3 different species
Dispersal 200 m	Sep-23-2018	10:30	1181	Octocorallia	Duva sp.	1	20	good	sand	
Dispersal 200 m	Sep-23-2018	10:30	1181	Octocorallia	Duva sp.	4	5-15	good	rock	
Dispersal 300 m	Sep-23-2018	10:44	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	10:48	1181	Octocorallia	sea pen	1	15	good	sand	
Dispersal 300 m	Sep-23-2018	10:49	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	10:51	1181	Porifera	sponge	1	25	good	rock	
Dispersal 300 m	Sep-23-2018	10:51	1181	Octocorallia	Duva sp.	1	20	good	rock	
Dispersal 300 m	Sep-23-2018	10:53	1181	Porifera	sponge	1	25	good	sand	
Dispersal 300 m	Sep-23-2018	10:56	1181	Octocorallia	Duva sp.	1	10	good	rock	
Dispersal 300 m	Sep-23-2018	10:56	1181	Desmospongiae	Polymastia sp.	2	5	good	rock	
Dispersal 300 m	Sep-23-2018	10:57	1181	Octocorallia	Duva sp.	3	10	good	rock	
Dispersal 300 m	Sep-23-2018	10:58	1181	Octocorallia	Duva sp.	3	10-15	good	sand	
Dispersal 300 m	Sep-23-2018	11:00	1181	Octocorallia	Duva sp.	2	30	good	rock/sand	
Dispersal 300 m	Sep-23-2018	11:00	1181	Desmospongiae	Polymastia sp.	1	15	good	rock	

Dispersal 300 m	Sep-23-2018	11:00	1181	Octocorallia	Anthomastus grandifloras	3	5	good	sand	
Dispersal 300 m	Sep-23-2018	11:02	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 300 m	Sep-23-2018	11:02	1181	Octocorallia	Gersemia sp.	2	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:03	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:03	1181	Porifera	sponge	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:04	1181	Octocorallia	Duva sp.	5	15-20	good	rock	
Dispersal 300 m	Sep-23-2018	11:05	1181	Octocorallia	Duva sp.	5	15	good	rock	
Dispersal 300 m	Sep-23-2018	11:06	1181	Octocorallia	Duva sp.	4	15	good	rock	
Dispersal 300 m	Sep-23-2018	11:06	1181	Octocorallia	Gersemia sp.	1	10	good	rock	
Dispersal 300 m	Sep-23-2018	11:14	1181	Octocorallia	Duva sp.	3	10	good	rock/sand	
Dispersal 300 m	Sep-23-2018	11:14	1181	Porifera	sponge	1	35	good	sand	
Dispersal 300 m	Sep-23-2018	11:14	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 300 m	Sep-23-2018	11:15	1181	Octocorallia	Duva sp.	2	20	good	rock	
Dispersal 300 m	Sep-23-2018	11:17	1181	Octocorallia	Duva sp.	5	15-20	good	rock	
Dispersal 300 m	Sep-23-2018	11:19	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:21	1181	Porifera	sponge	1	30	good	sand	
Dispersal 300 m	Sep-23-2018	11:24	1181	Octocorallia	Duva sp.	3	15	good	sand	Juvenile skate
Dispersal 300 m	Sep-23-2018	11:27	1181	Octocorallia	Duva sp.	2	5-10	good	sand	
Dispersal 300 m	Sep-23-2018	11:29	1181	Octocorallia	Duva sp.	4	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:29	1181	Octocorallia	Gersemia sp.	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:29	1181	Octocorallia	Duva sp.	2	5-10	good	sand	
Dispersal 300 m	Sep-23-2018	11:31	1181	Octocorallia	Duva sp.	3	10	good	rock	
Dispersal 300 m	Sep-23-2018	11:31	1181	Octocorallia	Duva sp.	4	10	good	rock	
Dispersal 300 m	Sep-23-2018	11:40	1181	Octocorallia	Duva sp.	2	10	good	rock	
Dispersal 300 m	Sep-23-2018	11:40	1181	Octocorallia	Gersemia sp.	1	10	good	rock	
Dispersal 300 m	Sep-23-2018	11:43	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:43	1181	Octocorallia	Acanella	1	10	good	sand	

Dispersal 300 m	Sep-23-2018	11:45	1181	Octocorallia	Duva sp.	5	10-15	good	rock	
Dispersal 300 m	Sep-23-2018	11:47	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 300 m	Sep-23-2018	11:49	1181	Octocorallia	Duva sp.	6	15	good	rock	
Dispersal 300 m	sep-23-2018	11:51	1181	Porifera	sponge	1	30	good	rock	
Dispersal 300 m	Sep-23-2018	11:51	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 300 m	Sep-23-2018	11:51	1181	Octocorallia	Duva sp.	4	5-10	good	sand	Polymastia (1) s5 cm
Dispersal 300 m	Sep-23-2018	11:54	1181	Porifera	sponge	1	35	good	rock	
Dispersal 300 m	Sep-23-2018	11:54	1181	Octocorallia	Duva sp.	5	10-15	good	rock	
Dispersal 300 m	Sep-23-2018	11:57	1181	Hydrozoa	Colonial hydroid	1	15	poor	sand	
Dispersal 300 m	Sep-23-2018	11:59	1181	Porifera	sponge	1	20	poor	sand	
Dispersal 300 m	Sep-23-2018	12:01	1181	Octocorallia	Acanella	1	5	poor	sand	
Dispersal 300 m	Sep-23-2018	12:03	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 300 m	Sep-23-2018	12:04	1181	Octocorallia	Duva sp.	12	20	good	rock	
Dispersal 300 m	Sep-23-2018	12:04	1181	Porifera	sponge	1	25	good	rock	white, funnel-shaped sponge
Dispersal 300 m	Sep-23-2018	12:04	1181	Desmospongiae	Polymastia sp.	1	5	good	rock	
Dispersal 400 m	Sep-23-2018	12:39	1181	Octocorallia	Duva sp.	15	10-25	good	rock/sand	
Dispersal 400 m	Sep-23-2018	12:45	1181	Octocorallia	Duva sp.	10	10	good	rock	
Dispersal 400 m	Sep-23-2018	12:45	1181	Porifera	Polymastia sp.	3	5	good	rock	
Dispersal 400 m	Sep-23-2018	12:46	1181	Octocorallia	Duva sp.	4	10-15	good	sand	
Dispersal 400 m	Sep-23-2018	12:47	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 400 m	Sep-23-2018	12:50	1181	Octocorallia	Duva sp.	1	15	good	sand	Dead sp
Dispersal 400 m	Sep-23-2018	12:53	1181	Octocorallia	Duva sp.	2	5	good	sand	
Dispersal 400 m	Sep-23-2018	12:53	1181	Octocorallia	Duva sp.	6	5-20	good	sand	
Dispersal 400 m	Sep-23-2018	12:54	1181	Octocorallia	Acanella	1	5	good	rock	
Dispersal 400 m	Sep-23-2018	12:56	1181	Octocorallia	Duva sp.	5	5	good	rock	
Dispersal 400 m	Sep-23-2018	12:56	1181	Desmospongiae	Polymastia sp.	2	5	good	rock	
Dispersal 400 m	Sep-23-2018	12:58	1181	Octocorallia	Acanella	1	5	good	sand	

Dispersal 400 m	Sep-23-2018	13:01	1181	Octocorallia	Duva sp.	6	5	good	rock	
Dispersal 400 m	Sep-23-2018	13:01	1181	Octocorallia	Duva sp.	5	5	good	rock	red hake? Anemone
Dispersal 400 m	Sep-23-2018	13:02	1181	Porifera	sponge	1	10	dead	sand	
Dispersal 400 m	Sep-23-2018	13:05	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:06	1181	Octocorallia	Acanella	1	10	poor	sand	
Dispersal 400 m	Sep-23-2018	13:07	1181	Octocorallia	Duva sp.	20	5	good	rock	
Dispersal 400 m	Sep-23-2018	13:07	1181	Desmospongiae	Polymastia sp.	7	5	good	rock	
Dispersal 400 m	Sep-23-2018	13:10	1181	Octocorallia	Gersemia sp.	3	10	good	rock	
Dispersal 400 m	Sep-23-2018	13:10	1181	Hydrozoa	Colonial hydroid	1	15	good	rock	
Dispersal 400 m	Sep-23-2018	13:10	1181	Desmospongiae	Polymastia sp.	4	5-15	good	rock	
Dispersal 400 m	Sep-23-2018	13:11	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 400 m	Sep-23-2018	13:12	1181	Octocorallia	Duva sp.	7	15	good	sand	
Dispersal 400 m	Sep-23-2018	13:14	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:15	1181	Octocorallia	Duva sp.	5	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:15	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:15	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:16	1181	Octocorallia	Duva sp.	8	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:18	1181	Octocorallia	Duva sp.	10	20	good	rock	
Dispersal 400 m	Sep-23-2018	13:18	1181	Porifera	Polymastia sp.	1	5	good	rock	sea star
Dispersal 400 m	Sep-23-2018	13:18	1181	Octocorallia	Gersemia sp.	1	10	good	rock	
Dispersal 400 m	Sep-23-2018	13:21	1181	Octocorallia	Duva sp.	10	15	good	rock	
Dispersal 400 m	Sep-23-2018	13:21	1181	Porifera	sponge	1	20	good	rock	funnel sponge
Dispersal 400 m	Sep-23-2018	13:22	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 400 m	Sep-23-2018	11:23	1181	Octocorallia	Duva sp.	2	5	good	rock	
Dispersal 400 m	Sep-23-2018	11:23	1181	Porifera	sponge	1	5	good	rock	honeycomb-like
Dispersal 400 m	Sep-23-2018	13:26	1181	Octocorallia	Duva sp.	2	5	good	rock/sand	
Dispersal 400 m	Sep-23-2018	13:26	1181	Octocorallia	Acanella	1	5	good	rock/sand	

Dispersal 400 m	Sep-23-2018	13:27	1181	Octocorallia	Duva sp.	7	5-10	good	rock	
Dispersal 400 m	Sep-23-2018	13:27	1181	Porifera	sponge	1	15	good	rock	
Dispersal 400 m	Sep-23-2018	13:29	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 400 m	Sep-23-2018	13:29	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 400 m	Sep-23-2018	13:30	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:30	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:31	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 400 m	Sep-23-2018	13:32	1181	Octocorallia	Duva sp.	3	5	good	rock	
Dispersal 400 m	Sep-23-2018	13:33	1181	Octocorallia	Gersemia sp.	1	5	good	sand	
Dispersal 400 m	Sep-23-2018	13:35	1181	Octocorallia	Duva sp.	6	10	good	rock	sponges
Dispersal 400 m	Sep-23-2018	13:35	1181	Octocorallia	Duva sp.	2	15	good	sand	mislabelled 513
Dispersal 400 m	Sep-23-2018	13:37	1181	Octocorallia	Duva sp.	7	5-15	good	sand	
Dispersal 400 m	Sep-23-2018	13:37	1181	Porifera	sponge	1	10	good	sand	honeycomb-like
Dispersal 400 m	Sep-23-2018	13:37	1181	Porifera	sponge	1	30	good	sand	fan sponge
Dispersal 400 m	Sep-23-2018	13:37	1181	Octocorallia	Gersemia sp.	2	5-10	good	sand	
Dispersal 400 m	Sep-23-2018	13:38	1181	Octocorallia	Duva sp.	2	15	good	rock	Sponge?
Dispersal 400 m	Sep-23-2018	13:40	1181	Octocorallia	Duva sp.	8	15	good	rock/sand	
Dispersal 400 m	Sep-23-2018	13:42	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:43	1181	Octocorallia	Gersemia sp.	4	15	good	rock	
Dispersal 400 m	Sep-23-2018	13:44	1181	Octocorallia	Duva sp.	15	20	good	sand	
Dispersal 400 m	Sep-23-2018	13:46	1181	Octocorallia	Duva sp.	3	20	good	sand	
Dispersal 400 m	Sep-23-2018	13:47	1181	Octocorallia	Duva sp.	10	15	good	rock/sand	
Dispersal 400 m	Sep-23-2018	14:48	1181	Octocorallia	Duva sp.	5	5-10	good	sand	
Dispersal 400 m	Sep-23-2018	13:49	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:50	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	13:51	1181	Octocorallia	Duva sp.	2	15-20	good	rock	
Dispersal 400 m	Sep-23-2018	13:53	1181	Octocorallia	Duva sp.	2	15-20	good	sand	

Dispersal 400 m	Sep-23-2018	13:53	1181	Octocorallia	Duva sp.	4	10-15	good	rock	sponge
Dispersal 400 m	Sep-23-2018	13:54	1181	Octocorallia	Acanella	1	5-10	good	sand	
Dispersal 400 m	Sep-23-2018	13:59	1181	Octocorallia	Duva sp.	10	15-20	good	rock	
Dispersal 400 m	Sep-23-2018	13:59	1181	Porifera	sponge	1	30	good	rock	
Dispersal 400 m	Sep-23-2018	14:00	1181	Octocorallia	Duva sp.	6	15	good	rock	
Dispersal 400 m	Sep-23-2018	14:01	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 400 m	Sep-23-2018	14:02	1181	Octocorallia	Duva sp.	21	10-15	good	sand	
Dispersal 400 m	Sep-23-2018	14:03	1181	Octocorallia	Duva sp.	4	15	good	sand	
Dispersal 400 m	Sep-23-2018	14:04	1181	Octocorallia	Duva sp.	15	15	good	sand	
Dispersal 500 m	Sep-23-2018	14:25	1181	Octocorallia	Duva sp.	3	15	good	rock	
Dispersal 500 m	Sep-23-2018	14:27	1181	Octocorallia	Duva sp.	6	10	good	sand	
Dispersal 500 m	Sep-23-2018	14:28	1181	Octocorallia	Gersemia sp.	3	15	good	rock	
Dispersal 500 m	Sep-23-2018	14:30	1181	Octocorallia	Duva sp.	1	20	good	sand	
Dispersal 500 m	Sep-23-2018	14:30	1181	Octocorallia	Gersemia sp.	1	10	good	sand	
Dispersal 500 m	Sep-23-2018	14:32	1181	Octocorallia	Duva sp.	7	5-15	good	rock	
Dispersal 500 m	Sep-23-2018	14:34	1181	Octocorallia	Duva sp.	6	20	good	rock/sand	sponge
Dispersal 500 m	Sep-23-2018	14:37	1181	Octocorallia	Acanella	1	10	poor	sand	partially dead
Dispersal 500 m	Sep-23-2018	14:38	1181	Octocorallia	Duva sp.	4	15	good	sand	
Dispersal 500 m	Sep-23-2018	14:39	1181	Octocorallia	Duva sp.	8	15	good	rock	
Dispersal 500 m	Sep-23-2018	14:42	1181	Octocorallia	Duva sp.	5	15	good	sand	
Dispersal 500 m	Sep-23-2018	14:43	1181	Octocorallia	Duva sp.	6	15-20	good	rock/sand	
Dispersal 500 m	Sep-23-2018	14:44	1181	Octocorallia	Duva sp.	6	15	good	sand	
Dispersal 500 m	Sep-23-2018	14:45	1181	Octocorallia	Duva sp.	15	15-30	good	rock/sand	
Dispersal 500 m	Sep-23-2018	14:45	1181	Porifera	sponge	2	10	good	rock/sand	honeycomb-like
Dispersal 500 m	Sep-23-2018	14:45	1181	Octocorallia	Gersemia sp.	5	30	good	rock/sand	check size
Dispersal 500 m	Sep-23-2018	14:47	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 500 m	Sep-23-2018	14:49	1181	Octocorallia	Duva sp.	8	10-15	good	sand	

Dispersal 500 m	Sep-23-2018	14:50	1181	Octocorallia	Duva sp.	4	10-15	good	sand	
Dispersal 500 m	Sep-23-2018	14:57	1181	Octocorallia	Duva sp.	3	10	good	rock	Haliclona?
Dispersal 500 m	Sep-23-2018	14:53	1181	Octocorallia	Duva sp.	3	15	good	rock/sand	
Dispersal 500 m	Sep-23-2018	14:54	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 500 m	Sep-23-2018	14:55	1181	Octocorallia	Duva sp.	5	20	good	sand	brittle star
Dispersal 500 m	Sep-23-2018	14:56	1181	Octocorallia	Duva sp.	5	15	good	rock	polymastia (1) 15cm
Dispersal 500 m	Sep-23-2018	14:56	1181	Octocorallia	Gersemia sp.	2	10	good	rock	
Dispersal 500 m	Sep-23-2018	14:56	1181	Octocorallia	Duva sp.	3	10	good	rock/sand	
Dispersal 500 m	Sep-23-2018	14:58	1181	Octocorallia	Duva sp.	2	10	good	rock	
Dispersal 500 m	Sep-23-2018	14:59	1181	Octocorallia	Duva sp.	6	10	good	sand	sea pen
Dispersal 500 m	Sep-23-2018	15:00	1181	Porifera	sponge	1	50	good	rock	fan-shaped sponge
Dispersal 500 m	Sep-23-2018	15:00	1181	Octocorallia	Duva sp.	3	5	good	rock	
Dispersal 500 m	Sep-23-2018	15:02	1181	Porifera	sponge	1	35	good	rock	fan-shaped sponge
Dispersal 500 m	Sep-23-2018	15:02	1181	Octocorallia	Duva sp.	4	10-20	good	rock	
Dispersal 500 m	Sep-23-2018	15:06	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 500 m	Sep-23-2018	15:04	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 500 m	Sep-23-2018	15:08	1181	Octocorallia	sea pen	1	20	good	sand	check ID
Dispersal 500 m	Sep-23-2018	15:10	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 500 m	Sep-23-2018	15:04	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 500 m	Sep-23-2018	15:13	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 500 m	Sep-23-2018	15:14	1181	Octocorallia	Duva sp.	2	15	good	sand	half dead on side of rock
Dispersal 500 m	Sep-23-2018	15:14	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 500 m	Sep-23-2018	15:15	1181	Octocorallia	Duva sp.	2	10	good	sand	1 dead
Dispersal 500 m	Sep-23-2018	15:18	1181	Octocorallia	Duva sp.	8	10-15	good	rock	
Dispersal 500 m	Sep-23-2018	15:13	1181	Octocorallia	Duva sp.	10	10	good	rock	
Dispersal 500 m	Sep-23-2018	15:13	1181	Porifera	sponge	1	40	good	rock	
Dispersal 500 m	Sep-23-2018	15:29	1181	Octocorallia	Acanella	2	<5	good	sand	

Dispersal 500 m	Sep-23-2018	15:31	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 500 m	Sep-23-2018	15:35	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 500 m	Sep-23-2018	15:36	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 500 m	Sep-23-2018	15:42	1181	Octocorallia	Duva sp.	5	30	good	sand	
Dispersal 500 m	Sep-23-2018	15:42	1181	Octocorallia	Gersemia sp.	2	15	good	sand	check size/abundance
Dispersal 700 m	Sep-23-2018	15:57	1181	Porifera	sponge	1	25	good	sand	
Dispersal 700 m	Sep-23-2018	16:03	1181	Octocorallia	Acanella	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:04	1181	Octocorallia	Duva sp.	6	10	good	rock	
Dispersal 700 m	Sep-23-2018	16:04	1181	Porifera	sponge	1	40	good	rock	fan-shaped sponge
Dispersal 700 m	Sep-23-2018	16:04	1181	Porifera	Polymastia sp.	2	5	good	rock	unknown
Dispersal 700 m	Sep-23-2018	16:12	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:12	1181	Porifera	Polymastia sp.	2	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:12	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:12	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:18	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:20	1181	Octocorallia	Gersemia sp.	1	10	poor	sand	partially dead
Dispersal 700 m	Sep-23-2018	16:21	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:27	1181	Octocorallia	Duva sp.	2	10	good	rock	10 small Gersemia or Duva
Dispersal 700 m	Sep-23-2018	16:29	1181	Porifera	sponge	1	30	poor	sand	
Dispersal 700 m	Sep-23-2018	16:31	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:33	1181	Porifera	sponge	7	5-10	good	sand	
Dispersal 700 m	Sep-23-2018	16:35	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:35	1181	Octocorallia	Acanella	2	25	dead	sand	
Dispersal 700 m	Sep-23-2018	16:39	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	16:40	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:40	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:40	1181	Octocorallia	sea pen	1	30	good	sand	Halopteris finmarchia

Dispersal 700 m	Sep-23-2018	16:41	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	16:41	1181	Octocorallia	Duva sp.	5	20-25	good	sand	
Dispersal 700 m	Sep-23-2018	16:41	1181	Octocorallia	Gersemia sp.	2	15	good	sand	
Dispersal 700 m	Sep-23-2018	16:43	1181	Octocorallia	Duva sp.	1	25	good	sand	
Dispersal 700 m	Sep-23-2018	16:44	1181	Porifera	sponge	1	50	good	sand	fan shaped sponge
Dispersal 700 m	Sep-23-2018	16:47	1181	Porifera	sponge	1	5	good	sand	purple & white sponge
Dispersal 700 m	Sep-23-2018	16:51	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 700 m	Sep-23-2018	16:53	1181	Octocorallia	Duva sp.	1	15-20	good	sand	no photo
Dispersal 700 m	Sep-23-2018	16:54	1181	Octocorallia	Duva sp.	5	5-15	good	rock	sponge
Dispersal 700 m	Sep-23-2018	17:00	1181	Octocorallia	Acanella	1	5	poor	sand	
Dispersal 700 m	Sep-23-2018	17:01	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:01	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:03	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:03	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:04	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:05	1181	Octocorallia	Acanella	2	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:05	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:07	1181	Octocorallia	Duva sp.	2	15	good	sand	large sea star
Dispersal 700 m	Sep-23-2018	17:10	1181	Octocorallia	Duva sp.	4	20	good	rock	partial bleaching
Dispersal 700 m	Sep-23-2018	17:10	1181	Octocorallia	Acanella	1	5	good	rock	
Dispersal 700 m	Sep-23-2018	17:13	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:14	1181	Octocorallia	Duva sp.	3	5	poor	sand	
Dispersal 700 m	Sep-23-2018	17:17	1181	Octocorallia	Duva sp.	4	25	good	rock	
Dispersal 700 m	Sep-23-2018	17:14	1181	Porifera	sponge	1	20	good	rock	
Dispersal 700 m	Sep-23-2018	17:21	1181	Octocorallia	Duva sp.	2	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:22	1181	Octocorallia	Duva sp.	2	5-10	good	sand	
Dispersal 700 m	Sep-23-2018	17:26	1181	Octocorallia	Duva sp.	2	10	good	sand	

Dispersal 700 m	Sep-23-2018	17:27	1181	Octocorallia	Duva sp.	8	30	good	rock	
Dispersal 700 m	Sep-23-2018	17:28	1181	Octocorallia	Duva sp.	10	30	good	rock/sand	second colony
Dispersal 700 m	Sep-23-2018	17:33	1181	Octocorallia	Duva sp.	3	20	good	sand	
Dispersal 700 m	Sep-23-2018	17:33	1181	Porifera	sponge	3	5-15	good	sand	
Dispersal 700 m	Sep-23-2018	17:33	1181	Octocorallia	Acanella	1	10	dead	sand	possibly dead
Dispersal 700 m	Sep-23-2018	17:34	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:34	1181	Octocorallia	Duva sp.	5	10	good	rock	
Dispersal 700 m	Sep-23-2018	17:35	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:35	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:36	1181	Octocorallia	Duva sp.	5	10-15	good	sand	
Dispersal 700 m	Sep-23-2018	17:37	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:37	1181	Porifera	sponge	1	25	good	sand	
Dispersal 700 m	Sep-23-2018	17:37	1181	Porifera	sponge	1	30	good	sand	fan-shaped sponge
Dispersal 700 m	Sep-23-2018	17:38	1181	Octocorallia	Duva sp.	8	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:42	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:44	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:44	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:44	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:44	1181	Octocorallia	Duva sp.	3	5-10	good	sand	
Dispersal 700 m	Sep-23-2018	17:46	1181	Octocorallia	Duva sp.	4	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:47	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 700 m	Sep-23-2018	17:48	1181	Octocorallia	Duva sp.	3	5-15	good	rock	
Dispersal 700 m	Sep-23-2018	17:48	1181	Porifera	sponge	1	20	good	rock	
Dispersal 700 m	Sep-23-2018	17:51	1181	Porifera	sponge	1	45	good	sand	
Dispersal 700 m	Sep-23-2018	17:51	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:52	1181	Octocorallia	Duva sp.	3	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:53	1181	Octocorallia	Duva sp.	6	10-15	good	sand	

Dispersal 700 m	Sep-23-2018	17:54	1181	Octocorallia	Duva sp.	2	10	good	rock	
Dispersal 700 m	Sep-23-2018	17:55	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:55	1181	Porifera	Polymastia sp.	1	5	good	sand	
Dispersal 700 m	Sep-23-2018	17:56	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 700 m	Sep-23-2018	17:57	1181	Octocorallia	Duva sp.	2	5-15	good	rock	
Dispersal 700 m	Sep-23-2018	17:58	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 1000 m	Sep-23-2018	18:29	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 1000 m	Sep-23-2018	18:30	1181	Octocorallia	Duva sp.	4	15-25	good	rock	
Dispersal 1000 m	Sep-23-2018	18:33	1181	Octocorallia	Duva sp.	5	5-10	good	sand	
Dispersal 1000 m	Sep-23-2018	18:33	1181	Octocorallia	Duva sp.	1	5	good	sand	good gernadier
Dispersal 1000 m	Sep-23-2018	18:36	1181	Porifera	sponge	1	30	good	rock	funnel-shaped sponge
Dispersal 1000 m	Sep-23-2018	18:36	1181	Porifera	Polymastia sp.	1	15	good	rock	
Dispersal 1000 m	Sep-23-2018	18:36	1181	Octocorallia	Duva sp.	2	5	good	rock	
Dispersal 1000 m	Sep-23-2018	18:38	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 1000 m	Sep-23-2018	18:39	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 1000 m	Sep-23-2018	18:40	1181	Octocorallia	Duva sp.	9	5-10	good	rock	
Dispersal 1000 m	Sep-23-2018	18:41	1181	Octocorallia	Duva sp.	6	5-15	good	rock	
Dispersal 1000 m	Sep-23-2018	18:46	1181	Octocorallia	Duva sp.	6	5-10	good	rock	
Dispersal 1000 m	Sep-23-2018	18:49	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1000 m	Sep-23-2018	18:50	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 1000 m	Sep-23-2018	18:50	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1000 m	Sep-23-2018	18:55	1181	Octocorallia	Duva sp.	5	5	good	rock	
Dispersal 1000 m	Sep-23-2018	18:56	1181	Porifera	sponge	1	30	good	rock	
Dispersal 1000 m	Sep-23-2018	18:56	1181	Octocorallia	Duva sp.	2	20	good	rock	
Dispersal 1000 m	Sep-23-2018	18:58	1181	Octocorallia	Acanella	4	10	good	rock	
Dispersal 1000 m	Sep-23-2018	18:59	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1000 m	Sep-23-2018	19:02	1181	Octocorallia	Duva sp.	1	20	good	sand	

Dispersal 1000 m	Sep-23-2018	19:02	1181	Porifera	sponge	1	20	good	sand	
Dispersal 1000 m	Sep-23-2018	19:03	1181	Octocorallia	Duva sp.	6	5	good	rock	
Dispersal 1000 m	Sep-23-2018	19:03	1181	Porifera	sponge	1	20	good	rock	
Dispersal 1000 m	Sep-23-2018	19:04	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 1000 m	Sep-23-2018	19:08	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 1000 m	Sep-23-2018	19:08	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 1000 m	Sep-23-2018	19:10	1181	Porifera	sponge	1	20	good	sand	
Dispersal 1000 m	Sep-23-2018	19:13	1181	Porifera	sponge	na	na		sand	large sponge field
Dispersal 1000 m	Sep-23-2018	19:14	1181	Porifera	sponge	1	50	good	sand	part of large sponge field
Dispersal 1000 m	Sep-23-2018	19:15	1181	Octocorallia	Duva sp.	15	5	good	rock	
Dispersal 1000 m	Sep-23-2018	19:16	1181	Porifera	sponge	na	na		sand	large sponge field
Dispersal 1000 m	Sep-23-2018	19:17	1181	Cnidaria	anemone	1	30	good	sand	
Dispersal 1000 m	Sep-23-2018	19:21	1181	Porifera	sponge	1	20	good	sand	continuation of large sponge field
Dispersal 1000 m	Sep-23-2018	19:22	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 1000 m	Sep-23-2018	19:25	1181	Octocorallia	Duva sp.	2	5	good	sand	yellow sponge
Dispersal 1000 m	Sep-23-2018	19:27	1181	Octocorallia	Duva sp.	10	5-15	good	rock	
Dispersal 1000 m	Sep-23-2018	19:27	1181	Octocorallia	Duva sp.	4	5	good	sand	
Dispersal 1000 m	Sep-23-2018	19:28	1181	Porifera	sponge	1	30	poor	sand	
Dispersal 1000 m	Sep-23-2018	19:30	1181	Octocorallia	Duva sp.	2	10	good	sand	skate
Dispersal 1400 m	Sep-23-2018	20:06	1181	Octocorallia	Duva sp.	1	15	good	sand	
Dispersal 1400 m	Sep-23-2018	20:07	1181	Porifera	sponge	1	40	poor	sand	size reference for sponge field
Dispersal 1400 m	Sep-23-2018	20:14	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:16	1181	Octocorallia	Duva sp.	1	20	good	sand	
Dispersal 1400 m	Sep-23-2018	20:17	1181	Octocorallia	Duva sp.	6	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:17	1181	Octocorallia	Gersemia sp.	1	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:19	1181	Porifera	sponge	1	35	good	rock	
Dispersal 1400 m	Sep-23-2018	20:19	1181	Octocorallia	Duva sp.	10	10-20	good	rock/sand	wide shot

Dispersal 1400 m	Sep-23-2018	20:21	1181	Octocorallia	Duva sp.	1	25	good	rock/sand	
Dispersal 1400 m	Sep-23-2018	20:21	1181	Octocorallia	Duva sp.	6	15	good	rock/sand	
Dispersal 1400 m	Sep-23-2018	20:22	1181	Octocorallia	Duva sp.	2	15-20	good	rock	
Dispersal 1400 m	Sep-23-2018	20:22	1181	Octocorallia	Duva sp.	1	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:23	1181	Octocorallia	Duva sp.	15	5	good	rock	check abundance
Dispersal 1400 m	Sep-23-2018	20:24	1181	Octocorallia	Duva sp.	2	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:24	1181	Octocorallia	Acanella	1	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:25	1181	Octocorallia	Duva sp.	6	5-10	good	rock	
Dispersal 1400 m	Sep-23-2018	20:29	1181	Octocorallia	Duva sp.	3	5	good	rock	
Dispersal 1400 m	Sep-23-2018	20:32	1181	Octocorallia	Duva sp.	7	5-10	good	rock	
Dispersal 1400 m	Sep-23-2018	20:34	1181	Porifera	sponge	1	20	good	rock	
Dispersal 1400 m	Sep-23-2018	20:34	1181	Octocorallia	Duva sp.	4	5	good	rock	
Dispersal 1400 m	Sep-23-2018	20:35	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:37	1181	Porifera	sponge	1	30	good	sand	
Dispersal 1400 m	Sep-23-2018	20:37	1181	Octocorallia	Duva sp.	3	15	good	sand	
Dispersal 1400 m	Sep-23-2018	20:37	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:38	1181	Octocorallia	Duva sp.	5	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:38	1181	Porifera	sponge	1	15	good	sand	
Dispersal 1400 m	Sep-23-2018	20:41	1181	Octocorallia	Duva sp.	3	5-10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:41	1181	Octocorallia	Duva sp.	2	5-10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:42	1181	Octocorallia	Acanella	1	10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:42	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:43	1181	Octocorallia	Duva sp.	2	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:44	1181	Octocorallia	Duva sp.	1	25	good	sand	
Dispersal 1400 m	Sep-23-2018	20:44	1181	Octocorallia	Duva sp.	1	20	good	sand	
Dispersal 1400 m	Sep-23-2018	20:46	1181	Octocorallia	Duva sp.	4	5-25	good	rock	
Dispersal 1400 m	Sep-23-2018	20:47	1181	Octocorallia	Duva sp.	5	10-15	good	rock	

Dispersal 1400 m	Sep-23-2018	20:48	1181	Octocorallia	Duva sp.	6	5	good	rock	
Dispersal 1400 m	Sep-23-2018	20:49	1181	Octocorallia	Duva sp.	3	5-15	good	sand	
Dispersal 1400 m	Sep-23-2018	20:50	1181	Octocorallia	Duva sp.	15	5	good	rock	
Dispersal 1400 m	Sep-23-2018	20:51	1181	Octocorallia	Duva sp.	5	5-10	good	rock	
Dispersal 1400 m	Sep-23-2018	20:51	1181	Octocorallia	Duva sp.	5	5	good	rock/sand	
Dispersal 1400 m	Sep-23-2018	20:52	1181	Octocorallia	Duva sp.	7	25-35	good	rock	
Dispersal 1400 m	Sep-23-2018	20:55	1181	Octocorallia	Duva sp.	4	5	good	sand	Dead Acanella?
Dispersal 1400 m	Sep-23-2018	20:56	1181	Octocorallia	Duva sp.	4	5-10	good	sand	
Dispersal 1400 m	Sep-23-2018	20:58	1181	Octocorallia	Duva sp.	1	5	good	sand	
Dispersal 1400 m	Sep-23-2018	20:59	1181	Octocorallia	Duva sp.	4	5-10	good	sand	
Dispersal 1400 m	Sep-23-2018	21:00	1181	Octocorallia	Duva sp.	2	10	good	sand	
Dispersal 1400 m	Sep-23-2018	21:00	1181	Octocorallia	Gersemia sp.	1	10	good	sand	
Dispersal 1400 m	Sep-23-2018	21:01	1181	Octocorallia	Duva sp.	2	20-30	good	sand	
Dispersal 1400 m	Sep-23-2018	21:03	1181	Porifera	sponge	1	30	good	rock	
Dispersal 1400 m	Sep-23-2018	21:03	1181	Octocorallia	Duva sp.	15	5	good	rock	check abundance
Dispersal 1400 m	Sep-23-2018	21:04	1181	Octocorallia	Duva sp.	3	5-15	good	sand	
Dispersal 1400 m	Sep-23-2018	21:04	1181	Octocorallia	Gersemia sp.	1	5	good	sand	
Dispersal 1400 m	Sep-23-2018	21:05	1181	Octocorallia	Duva sp.	2	5	good	sand	
Dispersal 1400 m	Sep-23-2018	21:05	1181	Octocorallia	Duva sp.	3	5	good	sand	sponges and fish
Dispersal 1400 m	Sep-23-2018	21:06	1181	Octocorallia	Duva sp.	1	5	good	sand	sea pen
Dispersal 1400 m	Sep-23-2018	21:08	1181	Octocorallia	Duva sp.	20	5-20	good	rock	
Dispersal 1400 m	Sep-23-2018	21:08	1181	Porifera	Polymastia sp.	1	20	good	rock	
Dispersal 1400 m	Sep-23-2018	21:10	1181	Octocorallia	Duva sp.	3	5-15	good	sand	sea pen
Dispersal 1400 m	Sep-23-2018	21:11	1181	Octocorallia	Duva sp.	4	10-20	good	sand	
Dispersal 1400 m	Sep-23-2018	21:11	1181	Octocorallia	Duva sp.	5	10	good	sand	
Dispersal 1400 m	Sep-23-2018	21:14	1181	Porifera	sponge	1	30	good	sand	
Dispersal 1400 m	Sep-23-2018	21:14	1181	Octocorallia	Duva sp.	1	20	good	sand	

Dispersal 1400 m	Sep-23-2018	21:15	1181	Porifera	sponge	1	40	good	sand
Dispersal 1400 m	Sep-23-2018	21:15	1181	Octocorallia	Duva sp.	3	20	good	sand
Dispersal 1400 m	Sep-23-2018	21:16	1181	Octocorallia	Duva sp.	5	15	good	sand
Dispersal 1400 m	Sep-23-2018	21:16	1181	Porifera	sponge	1	40	good	sand
Dispersal 1400 m	Sep-23-2018	21:18	1181	Porifera	sponge	1	30	good	sand
Dispersal 1400 m	Sep-23-2018	21:18	1181	Octocorallia	Duva sp.	3	20	good	sand
Dispersal 1400 m	Sep-23-2018	21:20	1181	Porifera	sponge	1	40	good	sand
Dispersal 1400 m	Sep-23-2018	21:20	1181	Octocorallia	Duva sp.	6	5	good	sand
Dispersal 1400 m	Sep-23-2018	21:21	1181	Porifera	sponge	1	45	good	sand
Dispersal 1400 m	Sep-23-2018	21:22	1181	Octocorallia	Duva sp.	10	15-20	good	sand
Dispersal 1400 m	Sep-23-2018	21:23	1181	Octocorallia	Duva sp.	1	10	good	sand
Dispersal 1400 m	Sep-23-2018	21:24	1181	Octocorallia	Duva sp.	4	15-25	good	rock
Dispersal 1400 m	Sep-23-2018	21:24	1181	Octocorallia	Duva sp.	7	15	good	rock

Appendix B – Harp Well Location (EL 1135) Benthic Observations

Number	Transect	Date	Time	Depth (m)	Class	Species ID	Abundance	Size (cm)	Condition	Substrate	Comments
15	Drill Center	Aug-23-2018	1:04	300	Hydrozoa	solitary_hyroid	1	10	good	sand	
16	Drill Center	Aug-23-2018	1:30	296	Octocorallia	Gersemia_sp.	1	10	good	rock	multiple branches, polyps in tight clusters, white/translucent colour
17-1	Drill Center	Aug-23-2018	1:55	299	Hydrozoa	colonial_hyroid	1	20	good	rock	single stem with 3 branches
17-2	Drill Center	Aug-23-2018	1:55	299	Demospongia	Polymastia_sp.	10	<5	good	sand/rock	round sponge, white colour, multiple papillae
17-3	Drill Center	Aug-23-2018	1:55	299	Hydrozoa	colonial_hyroid	1	15	poor	rock	
18-1	Drill Center	Aug-23-2018	2:25	297	Hydrozoa	solitary_hyroid	1	10	good	sand	
18-2	Drill Center	Aug-23-2018	2:25	297	Hydrozoa	colonial_hyroid	1	10	poor	sand	
19	Drill Center	Aug-23-2018	2:51	297	Hydrozoa	colonial_hyroid	2	30-40	poor	sand	
20	Drill Center	Aug-23-2018	3:11	298	Hydrozoa	solitary_hyroid	1	10	good	sand	
21	Drill Center	Aug-23-2018	3:29	270	Hydrozoa	colonial_hyroid	1	35	poor	sand	
22	Drill Center	Aug-23-2018	4:07	270	Hydrozoa	colonial_hyroid	1	35	poor	sand	
23	Drill Center	Aug-23-2018	4:53	296	Hydrozoa	solitary_hyroid	1	<5	good	sand	
24	Drill Center	Aug-23-2018	5:02	296	Porifera	sponge	25-30	10-15	good	sand	possibly Craniella sp.
25	Drill Center	Aug-23-2018	5:16	296	Porifera	sponge	1	15	good	rock	encrusting sponge, wrinkled appearance, white colour

26	Drill Center	Aug-23-2018	5:21	296	Demospongia	Phakellia_sp.	1	10	dead	sand	fan-shaped sponge, white colour, multiple viens with rough edges
27	Drill Center	Aug-23-2018	5:50	297	Hydrozoa	solitary_hyroid	1	20	good	sand	
28	Drill Center	Aug-23-2018	6:14	297	Porifera	sponge	3	15	good	sand	possibly Craniella sp.
29	Drill Center	Aug-23-2018	6:25	297	Demospongia	Polymastia_sp.	1	20	good	sand	round sponge, beige colour, multiple papillae
30	Drill Center	Aug-23-2018	7:01	297	Demospongia	Polymastia_sp.	1	5	good	sand	
31	Drill Center	Aug-23-2018	7:44	297	Porifera	sponge	1	25	dead	sand	white colour, appears fragmented
32	Drill Center	Aug-23-2018	8:17	297	Porifera	sponge	1	10	good	sand	possibly Craniella sp.
33	Drill Center	Aug-23-2018	8:38	298	Porifera	sponge	1	15	good	sand	possibly Craniella sp.
34	Drill Center	Aug-23-2018	9:10	298	Demospongia	Phakellia_sp.	1	15	good	sand	funnel-shaped sponge, white colour, short narrow stalk
35	Drill Center	Aug-23-2018	10:19	297	Demospongia	Phakellia_sp.	1	30	good	sand	cup-shaped sponge, white colour, circular ridges
36a	Drill Center	Aug-23-2018	10:32	298	Hydrozoa	colonial_hyroid	3	30-40	poor	sand	
36c	Drill Center	Aug-23-2018	10:32	298	Demospongia	Polymastia_sp.	2	5	good	sand	
37	Drill Center	Aug-23-2018	11:06	297	Demospongia	Phakellia_sp.	1	20	good	sand	
38	Drill Center	Aug-23-2018	11:30	297	Porifera	sponge	1	15	good	rock	encrusting sponge, smooth surface, white colour
39	Drill Center	Aug-23-2018	12:02	296	Hydrozoa	colonial_hyroid	1	40	good	sand	
40	Drill Center	Aug-23-2018	12:26	300	Demospongia	Polymastia_sp.	1	<5	good	sand	

41	Dispersal 200m	Aug- 23- 2018	13:47	297	Porifera	sponge	1	5	good	sand	vase-shaped sponge, white colour, possibly Phakellia sp.
42	Dispersal 200m	Aug- 23- 2018	14:02	301	Hydrozoa	solitary_hydroid	1	20	good	sand	
43	Dispersal 200m	Aug- 23- 2018	14:16	305	Octocorallia	Gersemia_sp.	1	15	good	sand	
44	Dispersal 300m	Aug- 23- 2018	14:43	310	Porifera	sponge	1	5	dead	sand	branching sponge fragment, possibly Haliclona sp.
45	Dispersal 300m	Aug- 23- 2018	14:51	307	Octocorallia	Gersemia_sp.	1	5	good	sand	
46	Dispersal 300m	Aug- 23- 2018	15:19	300	Porifera	sponge	1	15	dead	sand	branching sponge fragment, possibly Haliclona sp.
47	Dispersal 400m	Aug- 23- 2018	16:15	296	Hydrozoa	colonial_hydroid	1	40	poor	sand	
48-1	Dispersal 400m	Aug- 23- 2018	16:24	297	Demospongie a	Polymastia_sp.	1	5	good	sand	
48-2	Dispersal 400m	Aug- 23- 2018	16:24	297	Hydrozoa	colonial_hydroid	1	25	good	sand	
49	Dispersal 400m	Aug- 23- 2018	16:35	299	Hydrozoa	colonial_hydroid	1	30	poor	rock	
50	Dispersal 400m	Aug- 23- 2018	16:46	300	Hydrozoa	colonial_hydroid	1	15	good	rock	
51	Dispersal 400m	Aug- 23- 2018	16:50	303	Hydrozoa	colonial_hydroid	1	35	good	rock	
52	Dispersal 400m	Aug- 23- 2018	16:55	302	Hydrozoa	colonial_hydroid	1	35	good	sand	
52	Dispersal 400m	Aug- 23- 2018	16:55	302	Demospongie a	Polymastia_sp.	1	5	good	sand	
52	Dispersal 400m	Aug- 23- 2018	16:55	302	Porifera	sponge	1	20	good	sand	encrusting sponge, wrinkled appearance, white colour, multiple papillae

53	Dispersal 400m	Aug- 23- 2018	17:13	306	Porifera	sponge	1	10	dead	sand	branching sponge fragment, possibly Haliclona sp.
54	Dispersal 500m	Aug- 23- 2018	17:40	310	Porifera	sponge	1	15	dead	sand	branching sponge fragment, possibly Haliclona sp.
55	Dispersal 500m	Aug- 23- 2018	17:52	308	Hexacorallia	anemone	1	n/a	good	sand	contracted anemone
56	Dispersal 500m	Aug- 23- 2018	17:58	307	Hydrozoa	solitary_hyroid	1	10	good	sand	
57	Dispersal 500m	Aug- 23- 2018	18:30	303	Octocorallia	Gersemia_sp.	1	5	good	sand	
58	Dispersal 500m	Aug- 23- 2018	18:39	300	Porifera	sponge	1	15	good	sand	possibly Craniella sp.
59	Dispersal 500m	Aug- 23- 2018	18:50	298	Porifera	sponge	1	10	good	rock	encrusting sponge, smooth surface, white colour
60	Dispersal 750m	Aug- 23- 2018	19:36	298	Porifera	sponge	1	15	good	sand	possibly Craniella sp.
60b	Dispersal 750m	Aug- 23- 2018	19:36	298	Demospongia a	Polymastia_sp.	1	5	good	sand	
61	Dispersal 750m	Aug- 23- 2018	19:58	306	Octocorallia	Gersemia_sp.	1	15	good	sand	
61b	Dispersal 750m	Aug- 23- 2018	19:58	306	Octocorallia	Gersemia_sp.	1	5	good	sand	
62	Dispersal 750m	Aug- 23- 2018	20:05	306	Octocorallia	Gersemia_sp.	1	10	good	sand	
63	Dispersal 750m	Aug- 23- 2018	20:21	306	Octocorallia	Gersemia_sp.	1	15	good	sand	
64	Dispersal 750m	Aug- 23- 2018	20:34	306	Octocorallia	Gersemia_sp.	1	15	good	sand	
65	Dispersal 1000m	Aug- 23- 2018	21:11	304	Octocorallia	Gersemia_sp.	1	25	good	sand	
66	Dispersal 1000m	Aug- 23- 2018	21:18	305	Octocorallia	Gersemia_sp.	1	10	good	sand	

67	Dispersal 1000m	Aug- 23- 2018	21:29	305	Demospongie a	Polymastia_sp.	25-30	5-10	good	sand	
68	Dispersal 1000m	Aug- 23- 2018	21:35	305	Octocorallia	Gersemia_sp.	1	10	good	sand	
69	Dispersal 1000m	Aug- 23- 2018	21:49	305	Octocorallia	Gersemia_sp.	1	10	good	sand	possibly multiple individuals
70	Dispersal 1000m	Aug- 23- 2018	22:15	308	Demospongie a	Polymastia_sp.	20	5	good	rock	
70b	Dispersal 1000m	Aug- 23- 2018	22:15	308	Porifera	sponge	1	10	good	rock	blue encrusting sponge
71	Dispersal 1000m	Aug- 23- 2018	22:28	304	Porifera	sponge	1	30	good	rock	branching sponge, possibly Haliclona sp.
72	Dispersal 1200m	Aug- 23- 2018	22:59	304	Demospongie a	Phakellia_sp.	1	15	poor	sand	
73	Dispersal 1200m	Aug- 23- 2018	23:13	302	Octocorallia	Gersemia_sp.	1	10	good	sand	
74	Dispersal 1200m	Aug- 23- 2018	23:26	304	Octocorallia	Gersemia_sp.	1	10	good	sand	
75	Dispersal 1200m	Aug- 23- 2018	23:42	302	Octocorallia	Gersemia_sp.	1	10	good	sand	
76	Dispersal 1200m	Aug- 23- 2018	23:51	305	Octocorallia	Gersemia_sp.	1	15	good	sand	
77	Dispersal 1200m	Aug- 24- 2018	0:04	305	Octocorallia	octocoral	1	10	good	sand	bushy soft coral, grey/translucent colour, multiple branches

Appendix C – 2019 Harp Well Location (EL 1135) Benthic Observations

Date	Time (NDT)	Transect	Northing	Easting	Functional Group	Height/width (cm) ¹	Substrate
11-Jul	4:26	1	5270339	772928	Other Sponge	5	Cobble
11-Jul	4:32	1	5270358	772915	Leaf / Vase Shaped	20	Cobble
11-Jul	4:43	1	5270414	772806	Other Sponge	15	Fine
11-Jul	4:43	1	5270414	772806	Other Sponge	10	Cobble
11-Jul	4:49	1	5270444	772742	Other Sponge	10	Cobble
11-Jul	4:55	1	5270473	772676	Other Sponge	5	Cobble
11-Jul	4:55	1	5270473	772676	Other Sponge	5	Cobble
11-Jul	4:57	1	5270475	772674	Other Sponge	5	Rubble
11-Jul	4:57	1	5270475	772674	Other Sponge	5	Rubble
11-Jul	5:07	1	5270583	772536	Other Sponge	5	Cobble
11-Jul	5:11	1	5270581	772492	Other Sponge	10	Fine
11-Jul	5:24	1	5270683	772338	Leaf / Vase Shaped	15	Fine
11-Jul	5:25	1	5270685	772336	Other Sponge	10	Rubble
11-Jul	5:29	1	5270682	772293	Solid / Massive	20	Fine
11-Jul	5:38	1	5270759	772164	Other Sponge	20	Fine
11-Jul	5:40	1	5270760	772162	Other Sponge	46	Fine
11-Jul	5:49	1	5270817	772054	Other Sponge	10	Rubble
11-Jul	5:51	1	5270819	772056	Solid / Massive	20	Fine
11-Jul	7:14	1	5270904	771912	Solid / Massive	10	Fine
11-Jul	9:16	2	5271441	772702	Solid / Massive	20	Fine
11-Jul	9:19	2	5271435	772704	Solid / Massive	20	Fine
11-Jul	9:19	2	5271435	772704	Other Sponge	20	Fine
11-Jul	10:29	2	5271178	772770	Soft Coral	10	Fine
11-Jul	10:38	2	5271107	772793	Leaf / Vase Shaped	20	Fine
11-Jul	10:49	2	5271100	772792	Leaf / Vase Shaped	20	Fine
11-Jul	10:49	2	5271100	772792	Other Sponge	20	Fine
11-Jul	10:55	2	5271037	772807	Solid / Massive	20	Fine
11-Jul	11:06	2	5270983	772820	Soft Coral	10	Fine
11-Jul	11:16	2	5270957	772824	Solid / Massive	10	Fine
11-Jul	11:28	2	5270827	772864	Solid / Massive	20	Fine
11-Jul	11:46	2	5270681	772908	Solid / Massive	20	Fine
11-Jul	11:55	2	5270612	772919	Solid / Massive	22	Fine
11-Jul	12:13	2	5270531	772938	Other Sponge	20	Fine
11-Jul	12:28	2	5270430	772970	Solid / Massive	20	Fine
11-Jul	12:45	2	5270304	773005	Thin-Walled, Complex	34	Boulder
11-Jul	14:00	2	5271273	772754	Soft Coral	10	Fine
11-Jul	15:16	2	5271889	772583	Soft Coral	20	Fine
11-Jul	16:39	3	5271782	773943	Soft Coral	10	Fine
11-Jul	17:18	3	5271246	773634	Solid / Massive	31	Fine
11-Jul	17:44	3	5270908	773445	Solid / Massive	20	Fine
11-Jul	17:52	3	5270859	773410	Leaf / Vase Shaped	30	Cobble

Date	Time (NDT)	Transect	Northing	Easting	Functional Group	Height/width (cm) ¹	Substrate
11-Jul	18:32	3	5270373	773137	Solid / Massive	15	Fine
11-Jul	18:36	3	5270367	773135	Solid / Massive	26	Fine
11-Jul	18:40	3	5270349	773122	Solid / Massive	20	Fine
11-Jul	18:44	3	5270332	773112	Solid / Massive	20	Fine
11-Jul	19:15	4	5270294	773190	Round with Projections	10	Cobble
11-Jul	19:19	4	5270294	773189	Round with Projections	15	Boulder
11-Jul	19:23	4	5270300	773193	Leaf / Vase Shaped	41	Rubble
11-Jul	19:36	4	5270332	773337	Leaf / Vase Shaped	15	Fine
11-Jul	20:21	4	5270487	773897	Leaf / Vase Shaped	10	Fine
11-Jul	22:24	5	5269345	774539	Solid / Massive	20	Fine
11-Jul	22:28	5	5269350	774534	Solid / Massive	20	Fine
11-Jul	22:38	5	5269436	774384	Solid / Massive	15	Fine
11-Jul	22:45	5	5269484	774296	Solid / Massive	10	Fine
11-Jul	22:53	5	5269550	774184	Solid / Massive	15	Fine
11-Jul	23:00	5	5269586	774120	Other Sponge	32	Fine
11-Jul	23:58	5	5269699	773937	Leaf / Vase Shaped	20	Fine
12-Jul	0:15	5	5269839	773685	Solid / Massive	10	Fine
12-Jul	0:22	5	5269887	773596	Leaf / Vase Shaped	41	Fine
12-Jul	0:29	5	5269928	773529	Solid / Massive	15	Fine
12-Jul	0:34	5	5269951	773484	Solid / Massive	10	Fine
12-Jul	0:42	5	5270022	773368	Solid / Massive	10	Fine
12-Jul	0:45	5	5270029	773351	Solid / Massive	10	Fine
12-Jul	0:49	5	5270049	773312	Leaf / Vase Shaped	53	Bolder
12-Jul	0:55	5	5270083	773254	Solid / Massive	5	Fine
12-Jul	0:56	5	5270082	773253	Solid / Massive	20	Fine
12-Jul	1:00	5	5270102	773227	Solid / Massive	20	Fine
12-Jul	1:06	5	5270142	773159	Round with Projections	15	Fine
12-Jul	2:09	8	5270151	772844	Round with Projections	10	Fine
12-Jul	2:09	8	5270151	772844	Solid / Massive	5	Fine
12-Jul	2:19	8	5270133	772780	Solid / Massive	15	Boulder
12-Jul	2:20	8	5270132	772769	Solid / Massive	15	Fine
12-Jul	2:31	8	5270078	772563	Round with Projections	15	Cobble
12-Jul	2:33	8	5270069	772536	Solid / Massive	15	Boulder
12-Jul	2:34	8	5270067	772526	Solid / Massive	10	fine
12-Jul	2:44	8	5270031	772398	Soft Coral	10	Boulder
12-Jul	2:47	8	5270017	772357	Solid / Massive	20	Fine
12-Jul	2:57	8	5269988	772242	Solid / Massive	15	Fine
12-Jul	3:03	8	5269976	772207	Thin-Walled, Complex	25	Fine
12-Jul	3:18	8	5269913	771965	Soft Coral	15	Fine
12-Jul	3:23	8	5269885	771856	Solid / Massive	10	Fine
12-Jul	3:29	8	5269864	771786	Solid / Massive	15	Fine
12-Jul	3:35	8	5269840	771702	Solid / Massive	10	Fine

Date	Time (NDT)	Transect	Northing	Easting	Functional Group	Height/width (cm) ¹	Substrate
12-Jul	3:39	8	5269822	771647	Solid / Massive	10	Fine
12-Jul	3:46	8	5269798	771548	Solid / Massive	20	Fine
12-Jul	3:50	8	5269778	771468	Solid / Massive	10	Fine
12-Jul	3:52	8	5269774	771457	Solid / Massive	20	Fine
12-Jul	3:57	8	5269750	771357	Solid / Massive	10	Fine
12-Jul	5:38	7	5268662	772129	Other Sponge	20	Cobble
12-Jul	5:44	7	5268711	772158	Solid / Massive	10	Fine
12-Jul	5:45	7	5268711	772158	Round with Projections	10	Fine
12-Jul	5:49	7	5268755	772186	Solid / Massive	10	Fine
12-Jul	6:17	7	5268947	772291	Leaf / Vase Shaped	29	Fine
12-Jul	6:24	7	5268979	772315	Solid / Massive	23	Fine
12-Jul	6:59	7	5269295	772493	Thin-Walled, Complex	25	Fine
12-Jul	7:12	7	5269381	772542	Soft Coral	20	Fine
12-Jul	7:52	7	5269845	772810	Solid / Massive	20	Fine
12-Jul	8:01	7	5269907	772845	Solid / Massive	20	Fine
12-Jul	8:09	7	5269931	772868	Solid / Massive	20	Fine
12-Jul	8:18	7	5270002	772896	Leaf / Vase Shaped	20	Fine
12-Jul	8:31	7	5270111	772959	Solid / Massive	20	Fine
12-Jul	8:36	7	5270118	772963	Solid / Massive	22	Fine
12-Jul	9:54	6	5269695	773203	Round with Projections	10	Fine
12-Jul	10:24	6	5269285	773312	Solid / Massive	20	Fine
12-Jul	10:49	6	5269081	773368	Soft Coral	20	Fine
12-Jul	11:15	6	5268717	773468	Solid / Massive	20	Fine
12-Jul	11:29	6	5268544	773518	Other Sponge	20	Cobble
12-Jul	13:24	1	5271082	771616	Thin-Walled, Complex	50	Cobble
12-Jul	13:45	1	5271145	771509	Other Sponge	27	Fine

Notes: ¹Only coral and sponge targets 25 cm and over were measured using ImageJ, those below 25 cm are estimates from biologists in the field.