FINAL

EL 1165B DRILLING DISCHARGES FOLLOW-UP PROGRAM: BENTHIC HABITAT MONITORING 2020 REPORT

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ABBREVIATIONS

%	Percent
C-NLOPB	Canada-Newfoundland & Labrador Offshore Petroleum Board
cm	centimeters
DFO	Fisheries and Oceans Canada
EIS	Environmental impact statement
EL	Exploration license
EMCL	ExxonMobil Canada Ltd.
HD	High definition
HiPAP	High precision acoustic positioning system
km	kilometers
Ltd.	Limited
m	meters
mm	millimeters
NAD83	North American Datum 1983
NAFO	Northwest Atlantic Fisheries Organization
OWTG	Offshore Waste Treatment Guidelines
ROV	Remotely operated vehicle
SAR	Species at risk
SARA	*Species at Risk Act*
SBM	Synthetic-based mud
UTM	Universal Transverse Mercator
WBM	Water-based mud

1.0 INTRODUCTION

Wood Canada Environment and Infrastructure, a division of Wood Group PLC (Wood), was contracted by ExxonMobil Canada Ltd. (EMCL) to conduct seabed surveys at target locations on the eastern slopes of the Flemish Pass within Exploration Licence (EL) EL 1165B formerly EL 1135 (Figure 1-1, EMCL 2019). This is part of the follow-up monitoring program for fish and fish habitat as set out in the Eastern Newfoundland Offshore Exploration Drilling Project Environment Impact Statement (EIS) (EMCL 2017) as well as requirements set out in the *Canadian Environmental Assessment Act* (2012) Decision Statement (CEA Agency 2019).

1.1 Pre-Drilling Survey

The Harp L-42 wellsite within EL 1165B was previously surveyed in 2018 and in 2019 (Figure 1-2, Figure 1-3). The 2018 survey examined a 200 m by 200 m boundary around the proposed drill center, transects within the predicted drill cutting footprint, and three anchor points to 750 m from drill center (RPS 2018). A follow up pre-drilling survey was completed in 2019 to survey eight proposed anchor chain locations out to 1,750 m. The objectives of these previous surveys were to monitor the existing environment at the Harp L-42 wellsite for fish and fish habitat, in addition to the C-NLOPB's guidance for coral colonies. To mitigate potential harm from drilling activities to cold-water corals, the guidance indicates that drilling activities shall not occur within 100 m of a coral colony as defined by C-NLOPB as either:

- *Lophelia pertusa* reef complex; or
- Five or more large corals (larger than 30 centimeters in height or width) within a 100 square metre area.

From these pre-drill surveys, it was determined that no *L. pertusa* complexes or C-NLOPB coral colonies were observed within the surveyed area at the Harp L-42 wellsite therefore, drilling preceded at the site.

1.2 Scope

The objective of this follow-up program is to meet conditions 3.12.1, 3.12.2, 3.12.2.1, 3.12.2.2, and 3.12.2.3 of the Decision Statement (Table 1-1) and verify the accuracy of the predictions made during the environmental assessment as it pertains to marine fish and fish habitat and determine the effectiveness of the mitigation measures (CEA Agency 2019). This includes determining the drill cuttings disposition extent and thickness post-drilling and to verify the drilling cuttings modeling with visual survey and sediment chemical analysis for drill cutting components (e.g., barium). The effectiveness of the proposed mitigation measures for benthic fauna will also be evaluated by benthic visual survey. The post-drilling survey pattern is consistent with the pre-drilling survey layout, as the pre-drilling surveys covered the predicted drill cuttings footprint and can serve to validate the predictions of the cuttings model. This report will discuss the benthic habitat survey results as they pertain to conditions 3.12.2, 3.12.2.2, and 3.12.2.3 with other conditions discussed in the drill cuttings monitoring report (see Wood 2020a).

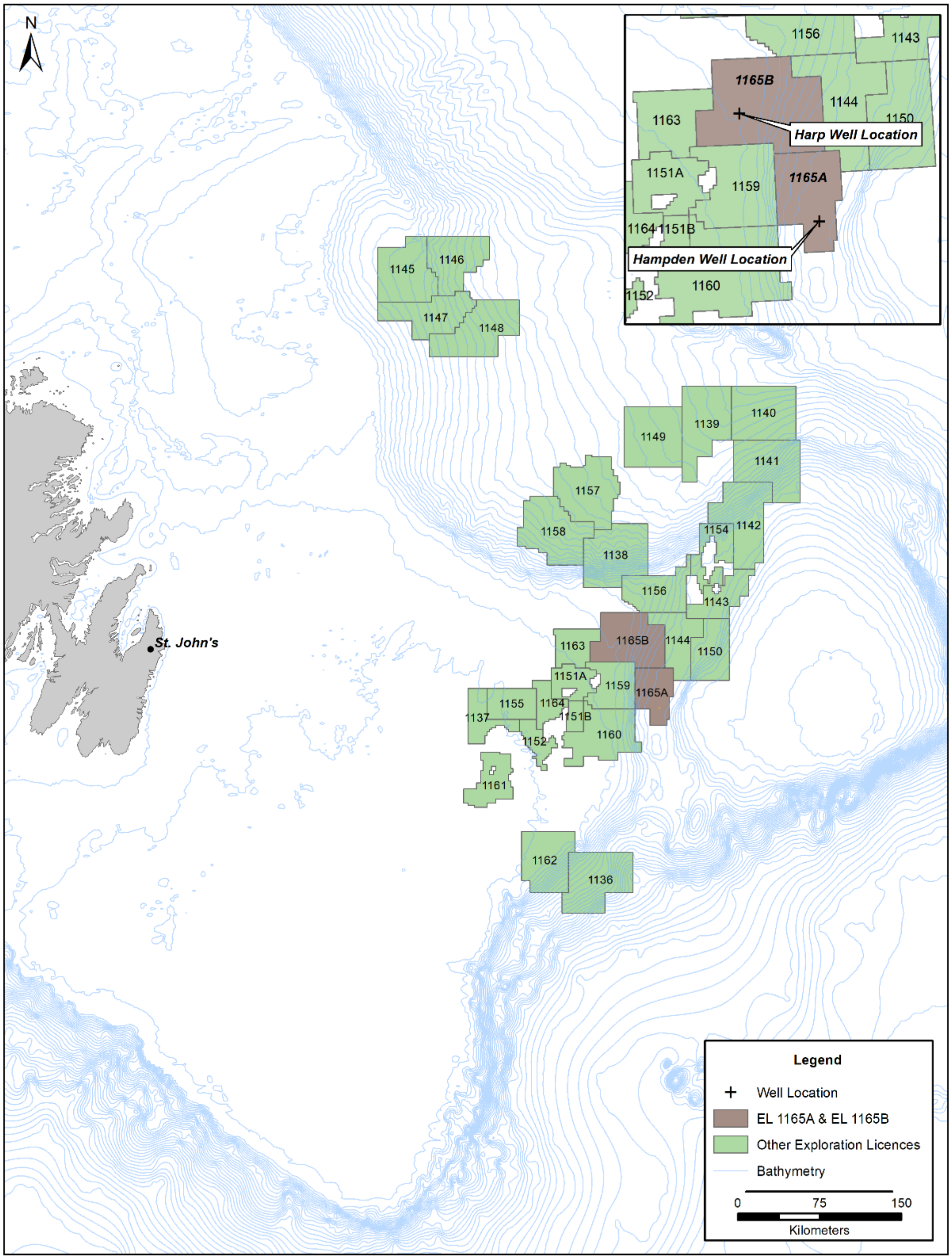


Figure 1-1 Location of EL 1165B Harp L-42 well.

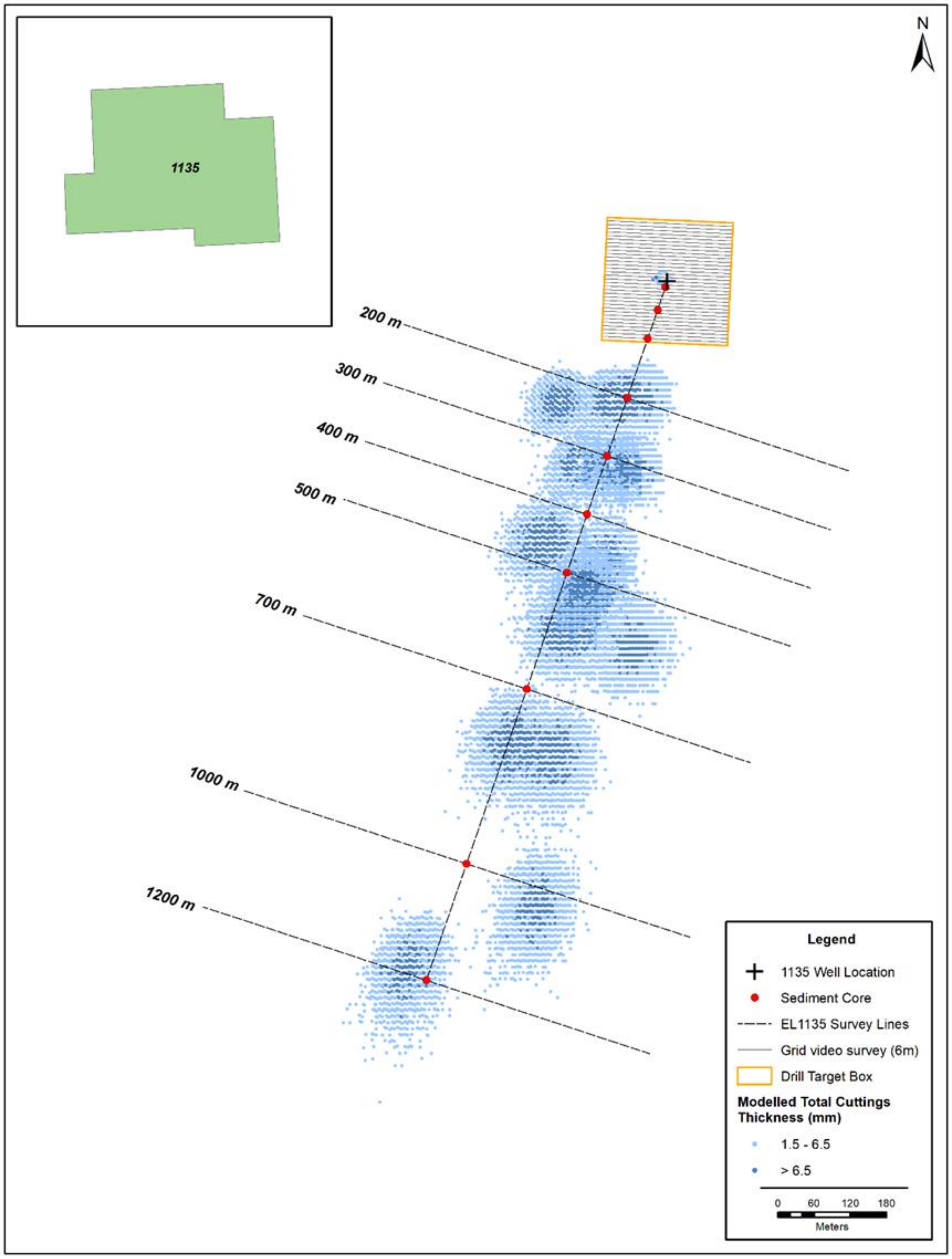


Figure 1-2 Post-drilling survey design at EL 1165B (formerly EL 1135) with modeled drill cutting distribution.

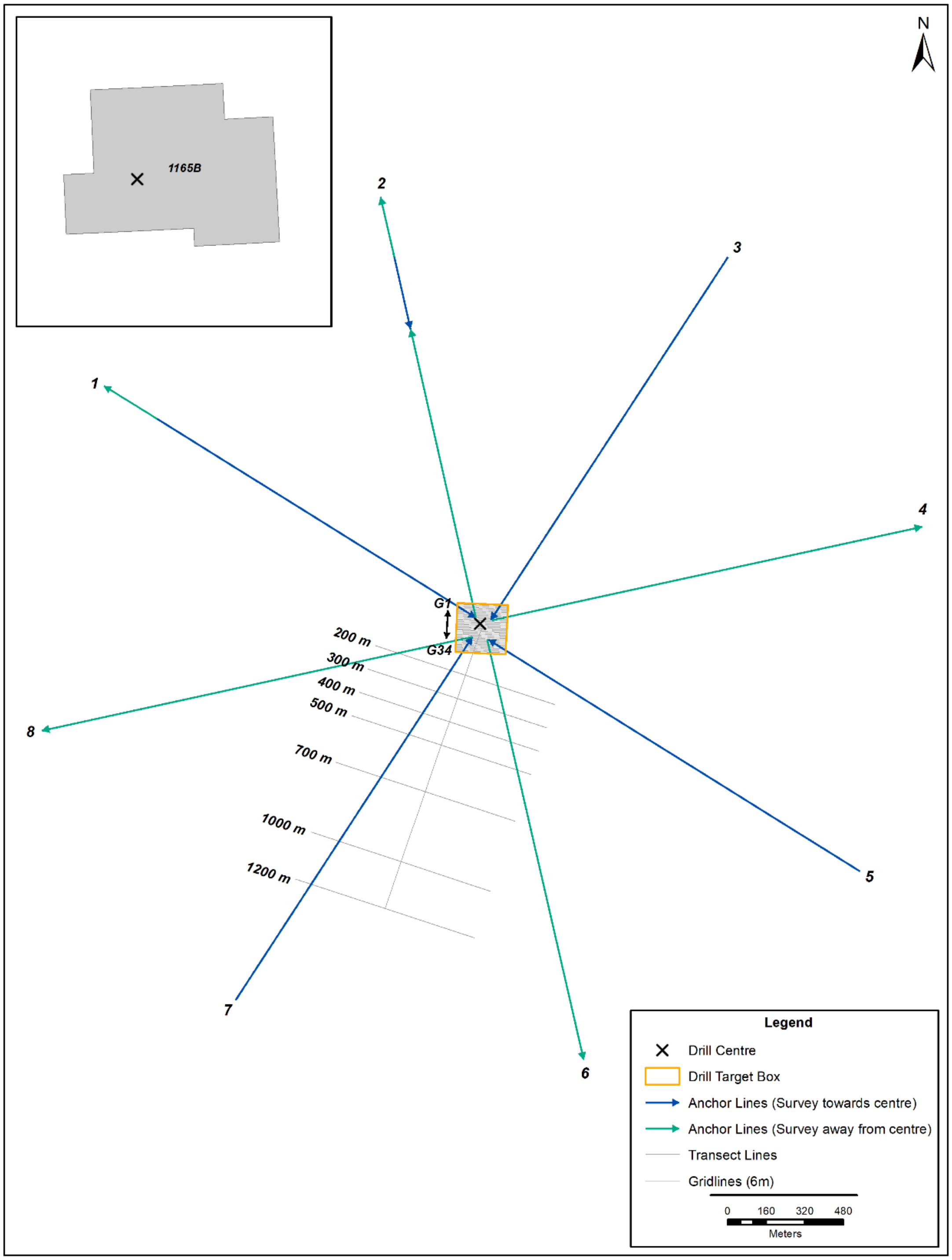


Figure 1-3 Anchor lines surveyed in 2019 at EL 1165B

Table 1-1 Conditions met by this Survey

Condition	Condition Details
3.12.1[2]	for every well, measure the concentration of synthetic-based drilling fluids retained on discharged drill cuttings as described in the Offshore Waste Treatment Guidelines to verify that the discharge meets, at a minimum, the performance targets set out in the Guidelines and any applicable legislative requirements, and report the results to the Board;
3.12.2[1, 2]	for the first well in each exploration licence, and for any well where drilling is undertaken in an area determined by coral and sponge surveys to be sensitive benthic habitat, and for any well located within a special area designated as such due to the presence of sensitive coral and sponge species, or a location near a special area where drill cuttings dispersion modelling predicts that drill cuttings deposition may have adverse effects, develop and implement, in consultation with Fisheries and Oceans Canada and the Board, follow-up requirements to verify the accuracy of the environmental assessment and effectiveness of mitigation measures as they pertain to the effects of cuttings discharges on benthic habitat. Follow-up shall include:
3.12.2.1[2]	measurement of sediment deposition extent and thickness post-drilling to verify the drill waste deposition modeling predictions;
3.12.2.2[1]	benthic fauna surveys to verify the effectiveness of mitigation measures; and
3.12.2.3[1, 2]	The Proponent shall report the information collected, as identified in conditions 3.12.2.1 and 3.12.2.2, including a comparison of modelling results to in situ results, to the Board within 60 days following the drilling of the first well in each exploration licence
[1]Condition met in this report [2]Condition met in the Drill Cutting Monitoring Report (see Wood 2020a)	

1.3 Drill Cuttings Modelling

The drill cutting model was used to predict the extent of released water-based muds (WBM) and synthetic-based muds (SBM) for four seasonal models (to account for variable environmental conditions throughout the year) (Amec Foster Wheeler 2017). Drilling operations took place from November to April and both WBM and SBM were used during the drilling at Harp L-42. The predicted dispersion of the drill cuttings in all seasonal scenarios (March, June, September, and December) was to the south of the wellsite, with the majority of the cuttings deposited within 1 km of the drilled well. A majority of the drill cutting thickness beyond 1 km were predicted to be 0.01 mm or less. The largest thicknesses were predicted to settle within 500 m from the wellsite, with a predicted thickness of 5.7 to 8.0 cm (Figure 1-2) (Amec Foster Wheeler 2017). The follow-up survey was designed in consideration of the drill cuttings model (RPS 2018).

2.0 METHODOLOGY

The survey was conducted from the MV *Paul A. Sacuta* with a Millennium 191 remotely operated vehicle (ROV) and a Seaeye Leopard ROV from April 30th to May 8th, 2020 (Figure 2-1). Both ROVs were equipped with forward facing pan/tilt/zoom high-definition (HD) cameras which were used to collect high-definition video during the duration of the survey and still images taken opportunistically. Video and still imagery were used to identify the benthic fauna (including corals and sponges) and visible drill cuttings. Physical sediment samples were collected using acrylic push cores deployed from the Millennium 191 ROV (Figure 2-1, A). The push cores were deployed and retrieved manually from a push core container attached to the ROV's tether management system. Both lasers were equipped with line lasers spaced 10 cm apart and a metal ruler deployed by the ROVs was used to take sediment depth measurements.

ExxonMobil Canada Ltd. was responsible for chartering the vessel and Oceaneering Canada Ltd. was responsible for the operation of the ROVs. Wood provided onboard marine biologists responsible for providing direction to ROV operators to ensure collection of video and images appropriate for characterizing cold-water corals and sponge groups and general characterization of fish and other invertebrates.

The survey video and imagery were geo-referenced using the ships HiPAP system. The HD video was encoded with a digital overlay that displayed depth (m), coordinates (UTM and NAD83), heading, date and time, and altitude above seafloor. Still images were encoded with a datetime stamp and numbered sequentially.

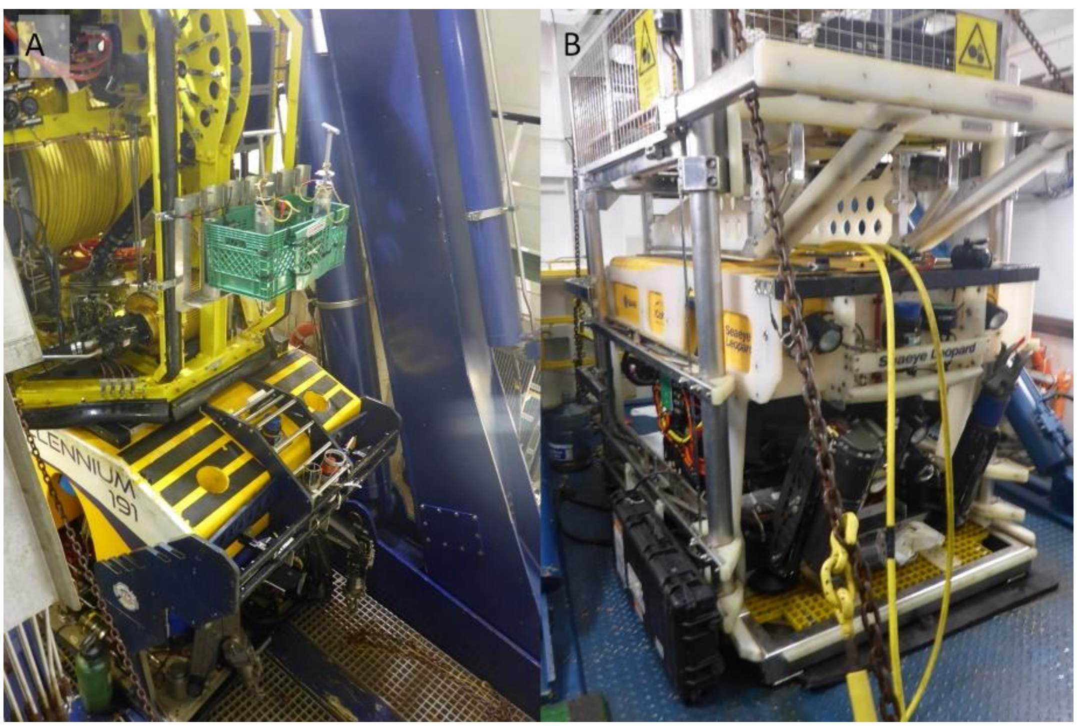


Figure 2-1 ROVs used for the 2020 EL 1165B post-drilling survey, A) Millennium 191 and B) Seaeye Leopard

2.1 Visual Survey Design

The survey consisted of a 200 m by 200 m grid composed of 36 horizontal surveys lines spaced 6 m apart centered around the wellhead (in place after the well was drilled) and eight transects within the modeled drill cutting footprint (Figure 1-2). The cuttings transects consisted of one 1,200 m long center transect (originating from the well head) with seven 750-m long transects perpendicular to the center transect at predetermined distances (Figure 1-2) (RPS 2018). During drilling operations, the initial drilling location was determined to be unsuitable and a new drill center was located approximately 20 m to the northwest of the initial drill center. The post-drilling survey was centered around the final drill center. The ROV operated in two modes: survey and sampling. Only video where the ROV was in survey mode was used for this analysis.

2.2 Visual Analysis

Benthic video imagery was analyzed for surficial geology (primary and secondary substrate types), coral and sponge abundance, distribution and condition, and invertebrate and fish taxa presence. To compare pre-drilling survey observations with post-drilling survey observations, drill cuttings, corals, and sponges were identified and geo-referenced for mapping. Survey transects were sectioned into 50 m lengths for analysis. Surficial geology, invertebrate, and fish taxa presence were analyzed along 50 m transect sections and summarized. Some differences exist between the 2018 and 2020 surveys, including the height the ROV flew (larger field of view in the 2018 survey) and the transect lines run (e.g. vertical grid box lines in 2018 and horizontal in 2020).

2.2.1 Drill Cuttings

Seafloor was analyzed visually for the presence or absence of deposited drill cuttings and reported separately from this report (see Wood 2020a).

2.2.2 Coral and Sponges

Identifying species characteristics of a coral or sponge can be difficult using video or still imagery alone, and a hand sample (examined under microscope with a certified taxonomist) is often needed. Thus, corals and sponges were identified to functional groups using a Northwest Atlantic Fisheries Organization (NAFO) area guide (Kenchington et al. 2015) (Table 2-1). Corals and sponges were enumerated, and specific locations were mapped.

Table 2-1 Coral and sponges functional groups based on Kenchington et al. (2015)

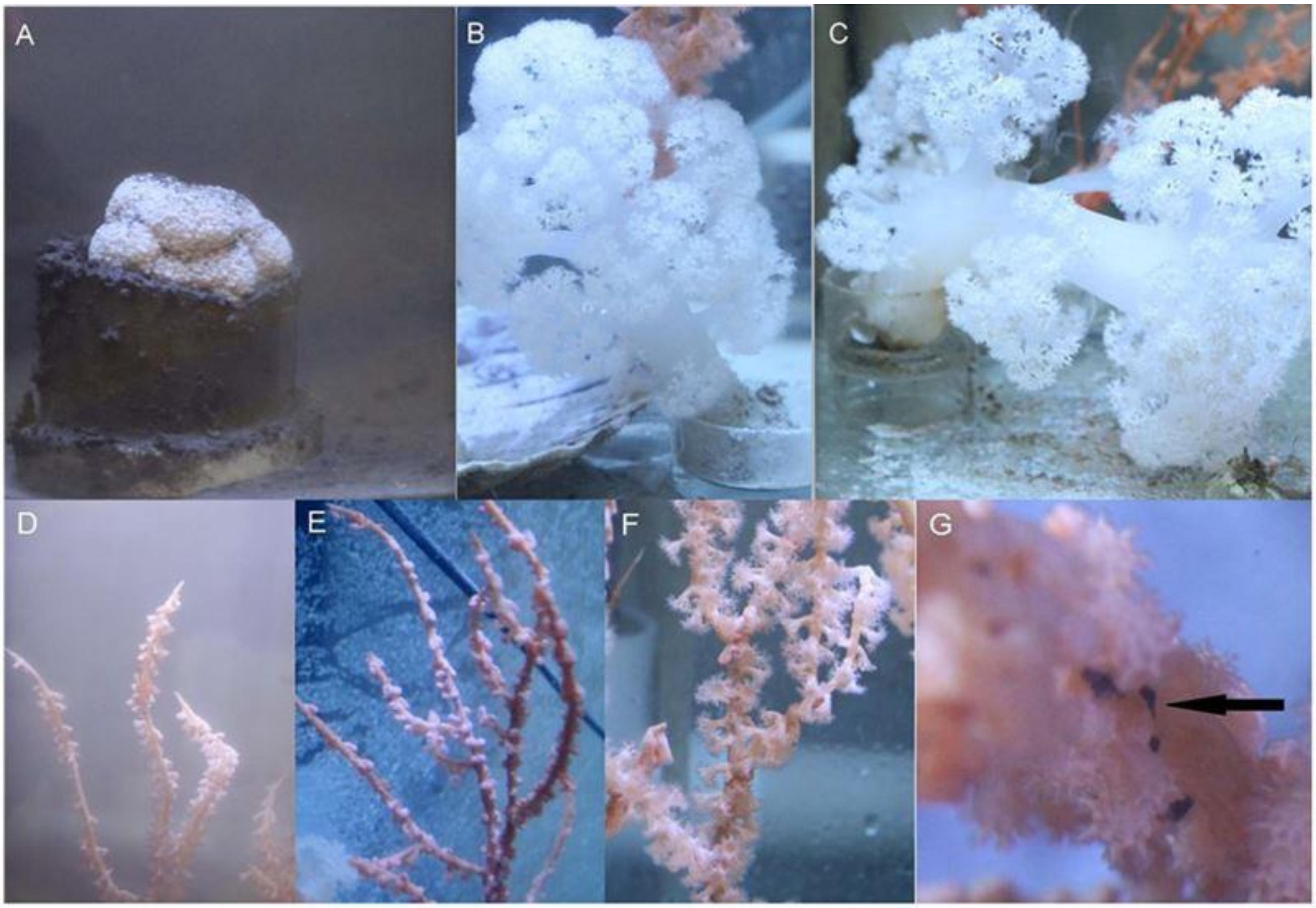
Coral Functional Groups	Sponge Functional Groups
Soft Corals (Alcyonacea)	Solid / Massive
Black Corals (Antipatharia)	Leaf / Vase Shaped
Hard Corals (Scleractinia)	Round with Projections
Branching Corals (Alcyonacea)	Thin-walled, Complex
Sea Pens (Pennatulacea)	Stalked
-	Other (e.g., encrusting sponge, finger sponge)

The condition of corals and sponges, including health, visible sedimentation, and burial will be estimated visually based on observations (Table 2-2). The methods to assess corals and sponges will follow those of Liefmann et al. (2018) and Fang et al. (2018), respectively. Liefmann et al. (2018) observed that when exposed to excessive sedimentation, soft corals (*Duva florida*) would contract their polyps for prolonged periods of time (Figure 2-2). Branching corals (*Priminoa resedaeformis*) lost a significant proportion of polyps. Observations of contracted polyps and missing polyps will be noted for any corals observed, including coral orientation (upright or bent over) in relation to the sediment. Fang et al. (2018) examined the effects of drilling discharges on sponges (*Geodia barretti*). In the study the sponges were exposed to three different treatments which physically manifested on the surface of the sponges differently (Figure 2-3). For this survey, any physical observations similar to those in Fang et al., 2018 (e.g. sediment veneer, chemical veneer) will be noted.

Table 2-2 Coral and Sponge condition classifications with descriptions.

Coral Condition		Sponge Condition	
Condition	**Description**	**Condition**	**Description**
Good (G)	Coral is oriented upright with polyps extended and not visible sedimentation	Sediment veneer[1] Presence/absence	Surface of a sponge has a veneer of sedimentation.
Bent (B)	Most of the coral is in contact with the seafloor and alive	Covered (C)	The base of the sponge or a portion of the body is obscured by accumulated sediment
Covered (C)	A portion of the coral is covered by accumulated sediment		
Missing polyps (#P)	A percentage of the coral's polyps are missing. Written as #P where # is the percentage of polyps missing		
Withdrawn (W)	Polyps are closed and pulled in.		
Dead (D)	Coral skeleton with no polyps		

[1] Veneers from background sedimentation are commonly observed on sponges and a distinction was not made between natural or drill cutting sediment veneers.



Source: Liefmann et al. 2018

Figure 2-2 Examples of exposure treatments on *Duva florida* (A, B, C) and *Primnoa resedaeformis* (D-G) A) Mine tailings sedimentation, B) Glass bead treatment, C) Control, D) Mine tailings sedimentation, E) Glass bead treatment, F) Control, G) Mine tailing accumulation captured in the mucus layer.

Source: Fang et al. 2018

Figure 2-3 Examples of exposure treatments on *Geodia barretti*: control (Con), suspended natural sediment (Sed), bentonite (Ben), barite (Bar).

2.2.3 Surficial Substrate

The primary and secondary substrate was identified by substrate type along 50 m transect sections. Substrate type was determined using the Udden-Wentworth Scale and categorized into a substrate class (Table 2-3) (Wentworth 1922, Kelly et al. 2009).

Table 2-3 Surficial substrate categories used to categorize benthic environment

Substrate Class	Substrate Type	Definition
Bedrock		Continuous solid bedrock
Coarse	Boulder	Rocks greater than 250 mm
	Rubble	Rocks ranging from 130 mm to 250 mm
Medium	Cobble	Rocks ranging from 30 mm to 130 mm
	Gravel	Granule size or coarser, 2 mm to 30 mm
Fine	Sand	Fine deposits ranging from 0.06 mm to 2 mm
	Mud	Material encompassing both silt and clay < 0.06 mm
Organic/Detritus		A soft material containing 85 percent or more organic materials
Shells		Calcareous remains of shellfish or invertebrates containing shells

2.2.4 Other Taxa

All other invertebrate taxa were identified to phylum, and fish were identified to functional groups as described in Table 7 of Ollerhead et al. (2017). Taxa abundances were enumerated in 50 m transect sections. While the survey was not specifically to assess presence of Species at Risk (SAR), they were also identified. Representative photos were taken opportunistically.

2.3 Mapping

The ROV transects were plotted using GIS software ArcGIS 10.5 (ESRI) in NAD83 datum. Fixes were taken for start and end of each transect, measurements, and core samples. Overlay coordinates were used for coral and sponge locations and mud cuttings delineation (visual analysis).

3.0 RESULTS

The drill cuttings survey collected benthic video imagery covering 13.65 km of the seafloor. The center position of the post-drilling survey differed slightly from the pre-drilling as the final drill center was moved to the northwest. However, the two survey areas did overlap and could be compared (Figure 3-1). Survey coordinates from the 2020 survey can be found in Appendix A, and faunal densities per section and area can be found in Appendix B.

3.1 Surficial Substrate

For all lines, fine (sand, mud, or drill cuttings) was the dominant substrate class observed (Table 3-1). Other substrate present throughout the Harp L-42 area was predominantly coarse (boulders and rubble) with lesser amounts of medium (cobble and gravel) substrate (Figure 3-2). Similar substrates were present during the 2018 pre-drilling survey, with small variations for each substrate type (Table 3-1, Figure 3-3).

Table 3-1 Summary of surficial substrate within the 200 x 200 m grid lines and predicted drill cuttings transects in 2018 and 2020.

Area	Year	Fine (%)	Medium (%)	Coarse (%)	NA (%)
Grid Lines	2018	85.5	6.3	8.1	0
	2020	89.0	0.2	7.8	3.0
Transects	2018	89.9	3.0	7.1	0
	2020	91.0	3.6	5.2	0.2
NA are lines where the substrate was not visible, or the ROV did not move					

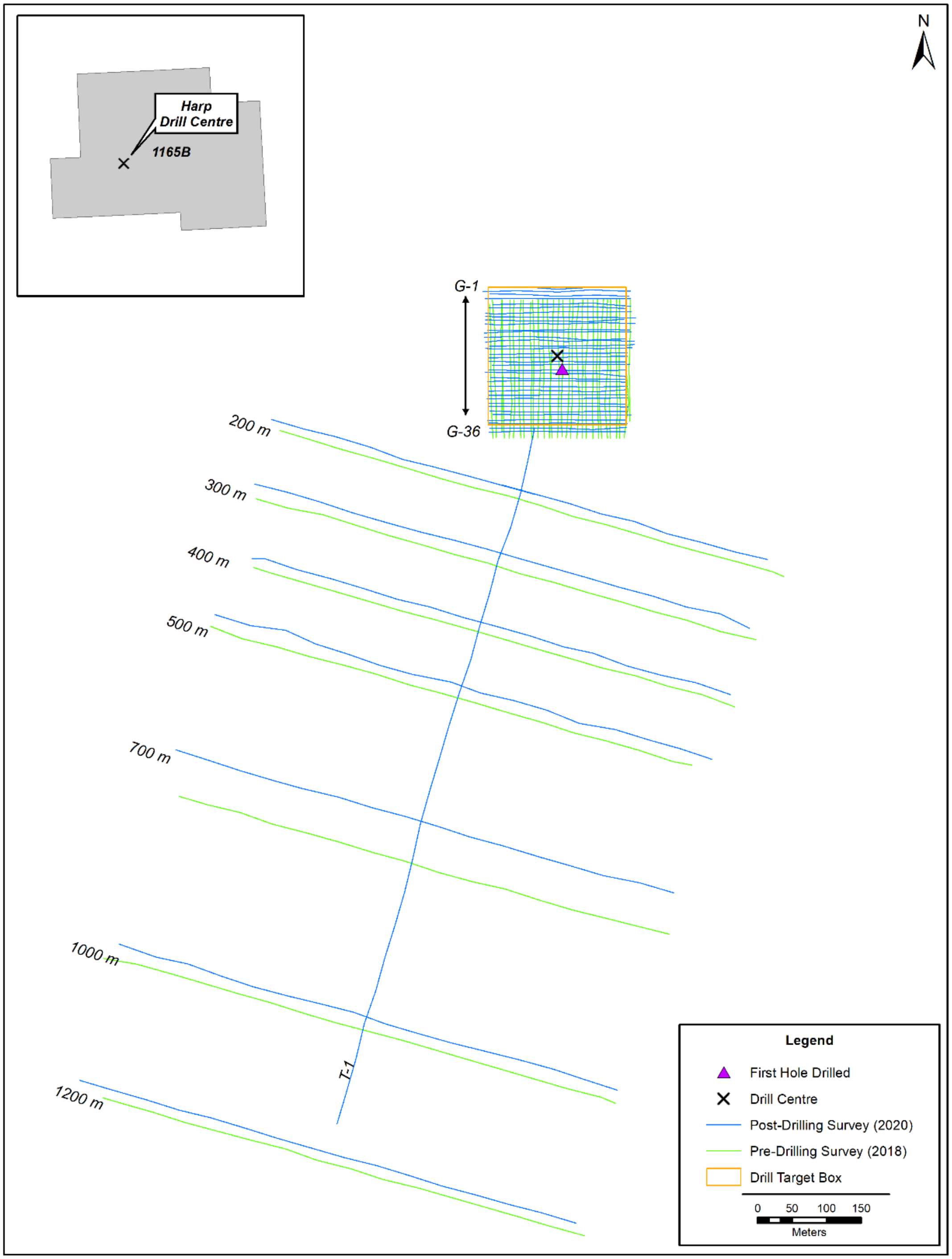


Figure 3-1 Comparison of pre-drilling and post-drilling survey design at EL 1165B

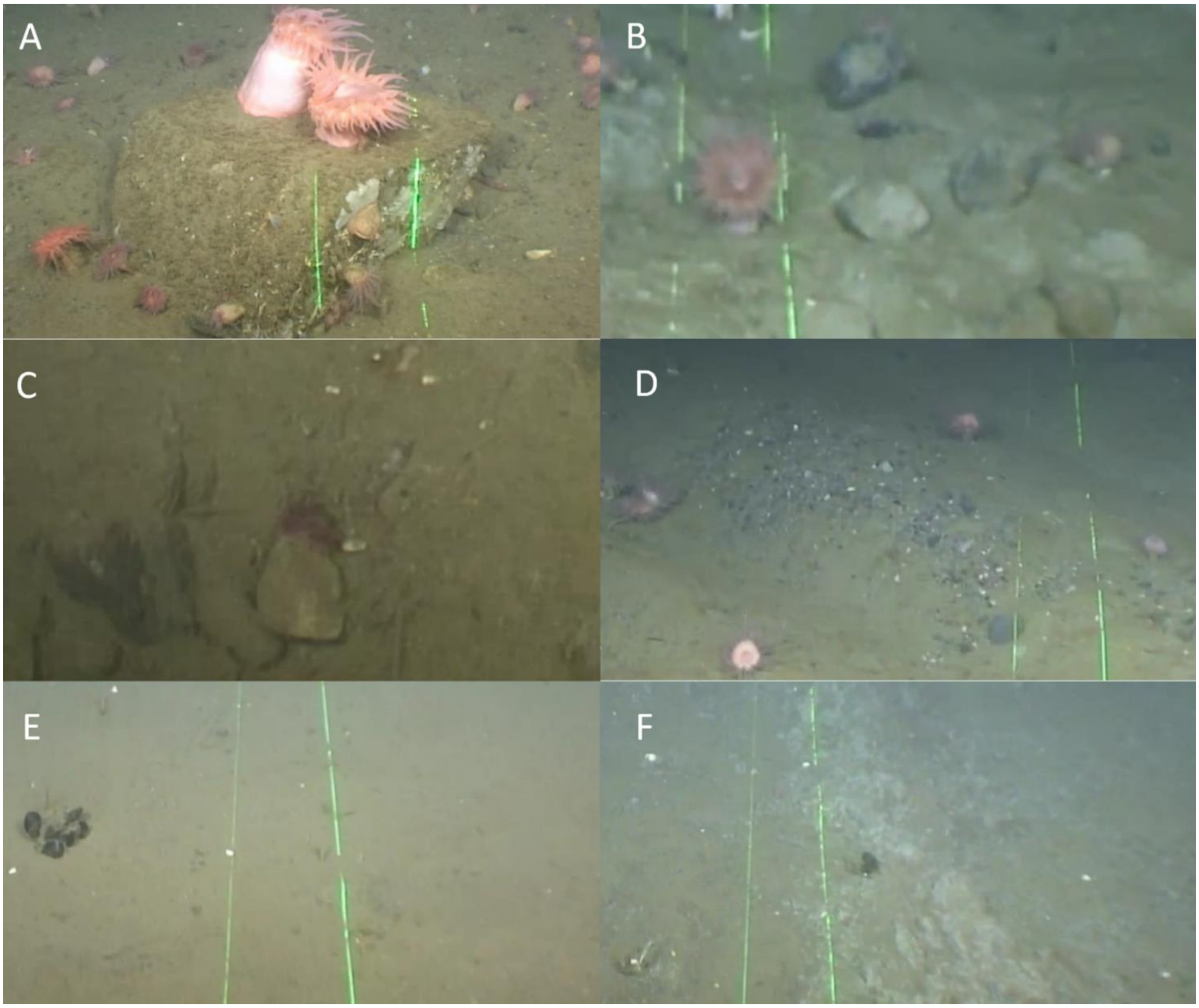


Figure 3-2 Representative photo of substrate categories observed at Harp L-42: A) boulder, B) rubble, C) cobble, D) gravel, E) sand (fine), and F) drill cuttings.

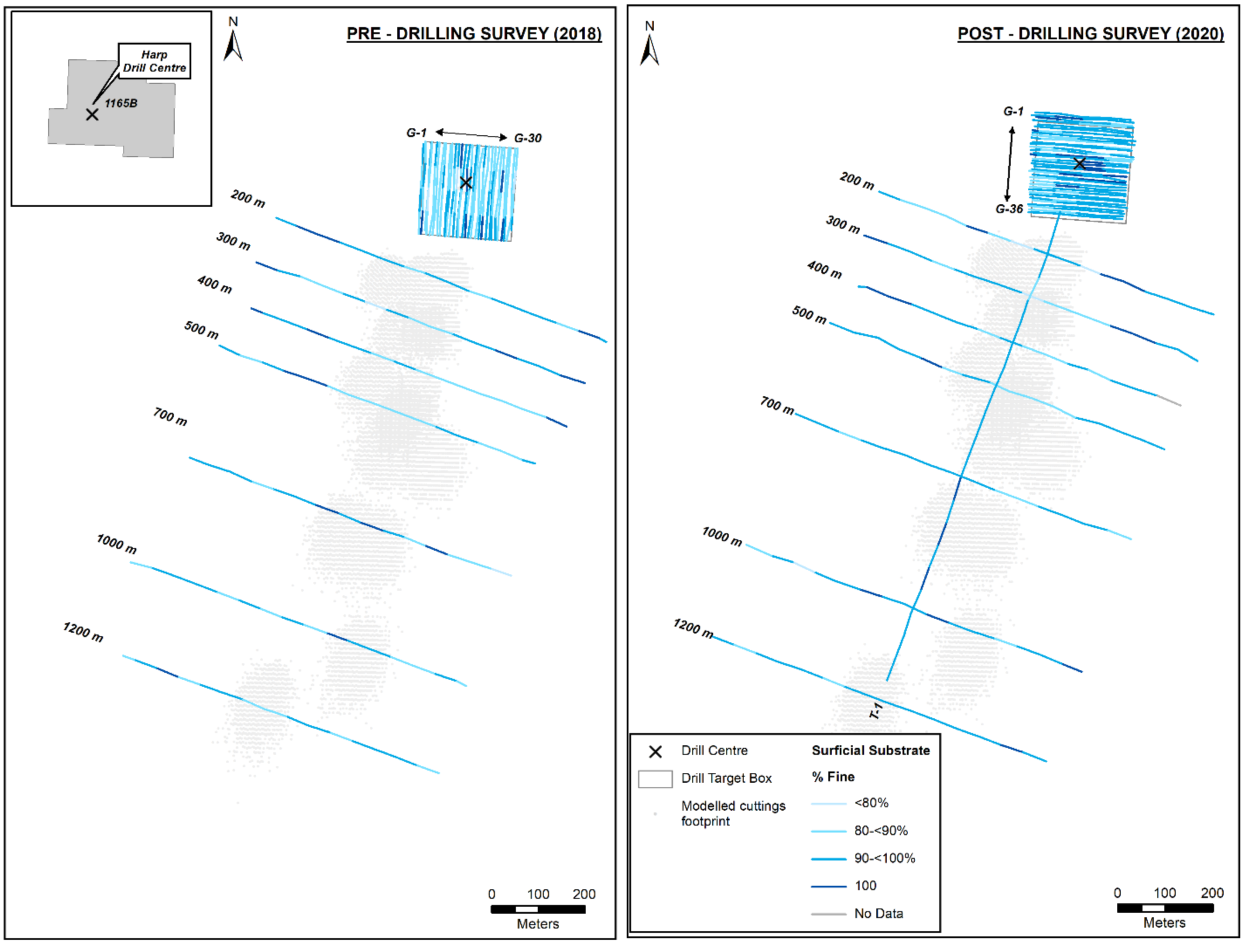


Figure 3-3 Summary of surficial substrate at Harp from 2018 and 2020.

3.2 Corals and Sponges

3.2.1 Corals

Three coral functional groups (soft corals, sea pens, and hard corals) were observed within the survey area (Table 3-2, Figure 3-4). As in the pre-drilling survey, soft corals (Nephtheids) were the most commonly observed functional group (Table 3-2, Figure 3-4A) and mainly observed to the southwest of the well head outside of the 200 x 200 m survey grid (Figure 3-5). A majority of the soft corals were observed along transect T-700, T-1000, and T-1200 in 2020. This is consistent with observations reported in the pre-drilling survey (Figure 3-5, RPS 2018, EMCL 2018). The sea pens and cup coral were observed to the northwest of the well head within the 200 x 200 m survey grid (Figure 3-4B and C, Figure 3-6). A solitary cup coral (hard coral, Figure 3-4C) was observed along G-3 and a total of three sea pens (Figure 3-4B) were observed along G-13 and G-14. The cup coral is not included in the summary table as it was within a section smaller than 10 m and was thus excluded. No sea pens or cup corals were noted in the 2018 survey.

In addition to abundance and distribution, the condition of the soft corals was also noted (Figure 3-7). The visible effects of drill cuttings on soft corals as observed in other studies (Liefmann et al., 201) were not observed at this site. Soft corals mainly appeared upright with polyps extended (one soft coral on a bolder was extended to the side) with no visible sedimentation on them. Soft corals inhabiting sediments did not appear to be on visibly distinct drill cuttings and were only observed on natural sediments. The hard coral and sea pens observed during the survey were harder to visually assess due to the presence of cod that both obscured the field of view of the coral as well as stirred up bottom sediment further reducing the visibility. However, although assessments of these taxa are limited some observations could be made with reduced visibility taken into account. Both the sea pens and hard coral were observed to the north of the drill center outside of the visible drill cuttings pile. The sea pens were 10s of centimeters in height and the hard coral was visible above the sediment. Though no sea pens or hard coral were noted in 2018, soft coral condition was similar to 2020 with all appearing upright and with polyps extended.

Table 3-2 Summary statistics of coral group density in the 200 x 200 m grid box and transect lines in 2018 and 2020.

Taxa Group	Area	Year	Mean	St. dev.	Median	Min	Max
Soft Corals	Grid Lines	2018	<0.001	0.001	0	0.007	0.07
		2020	<0.001	0.002	0	0.013	0.015
	Transects	2018	0.003	0.005	0	0.007	0.035
		2020	0.012	0.018	0	0.013	0.088
Sea Pens	Grid Lines	2018	0	-	-	-	-
		2020	<0.001	0.002	0	0.014	0.016
	Transects	2018	0	-	-	-	-
		2020	0	-	-	-	-

Mean is taxa abundance per grid line or transect area (individuals per m^2)
Total number of survey sections: Grid Lines (2018 (n=120), 2020 (n=153)), Transects (2018 (n=107), 2020 (n=126))
Only sections above 10 m linear distance were included for summary statistics
Min is the smallest non-zero density value

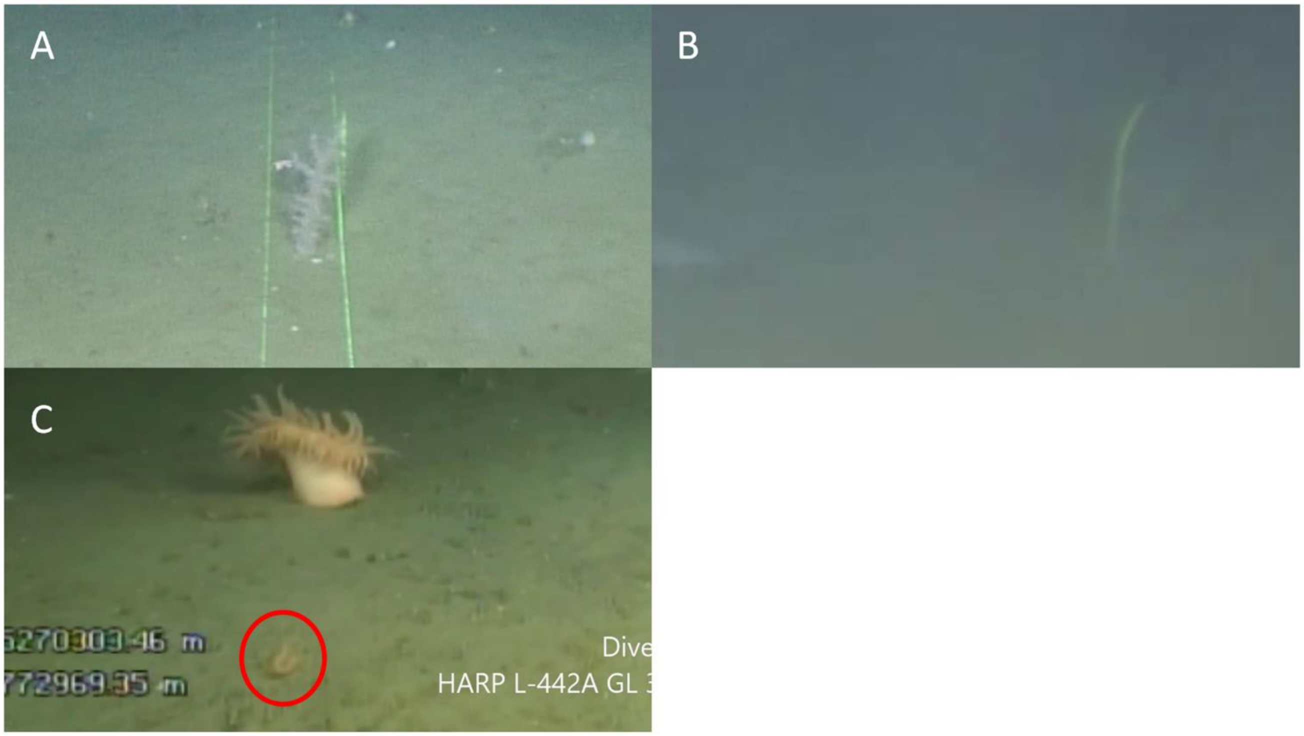


Figure 3-4 Representative photos of each coral functional group: A) Soft coral, B) Sea pen, C) Hard coral. Lasers are 10 cm apart.

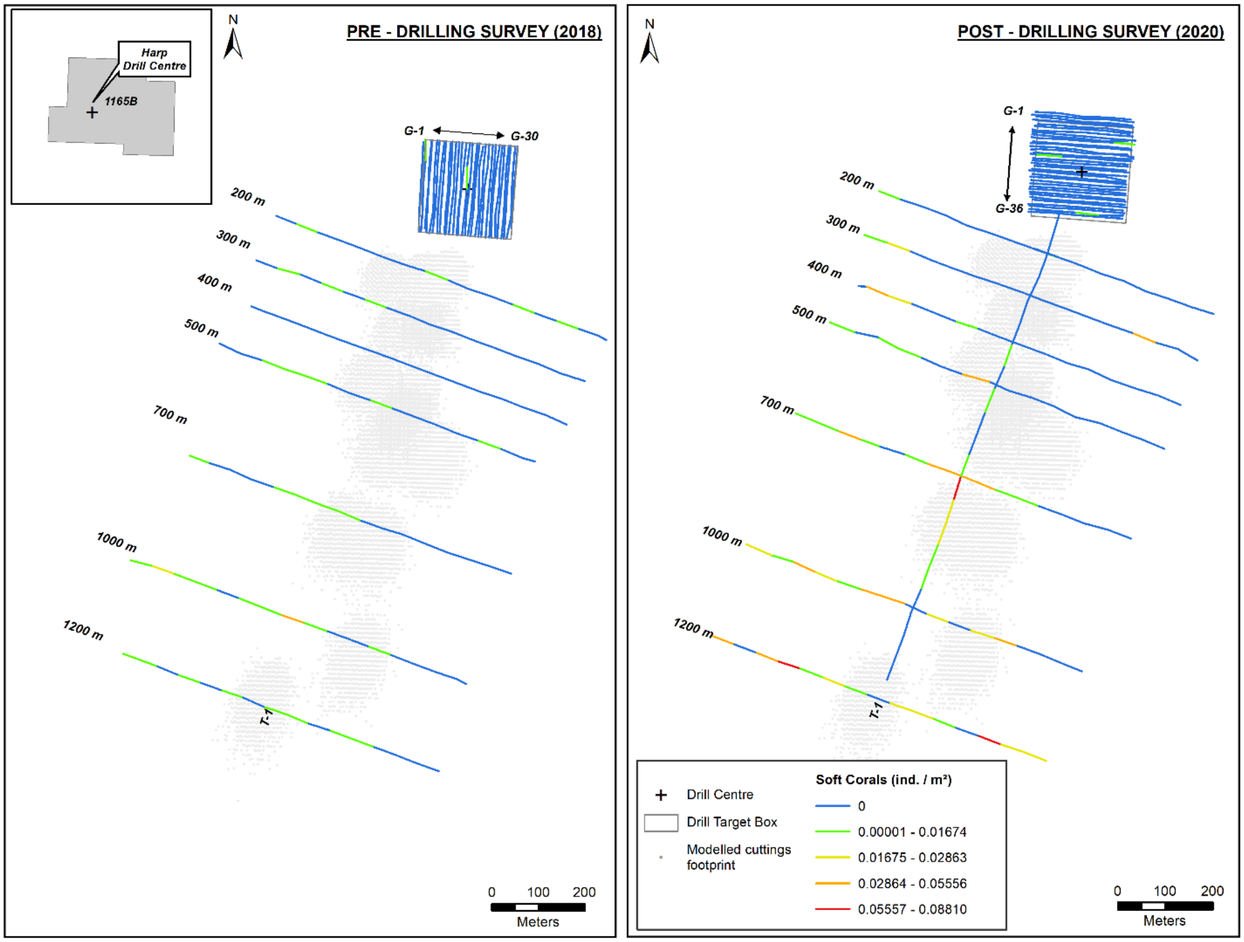


Figure 3-5 Summary of soft coral density at Harp in 2018 and 2020.

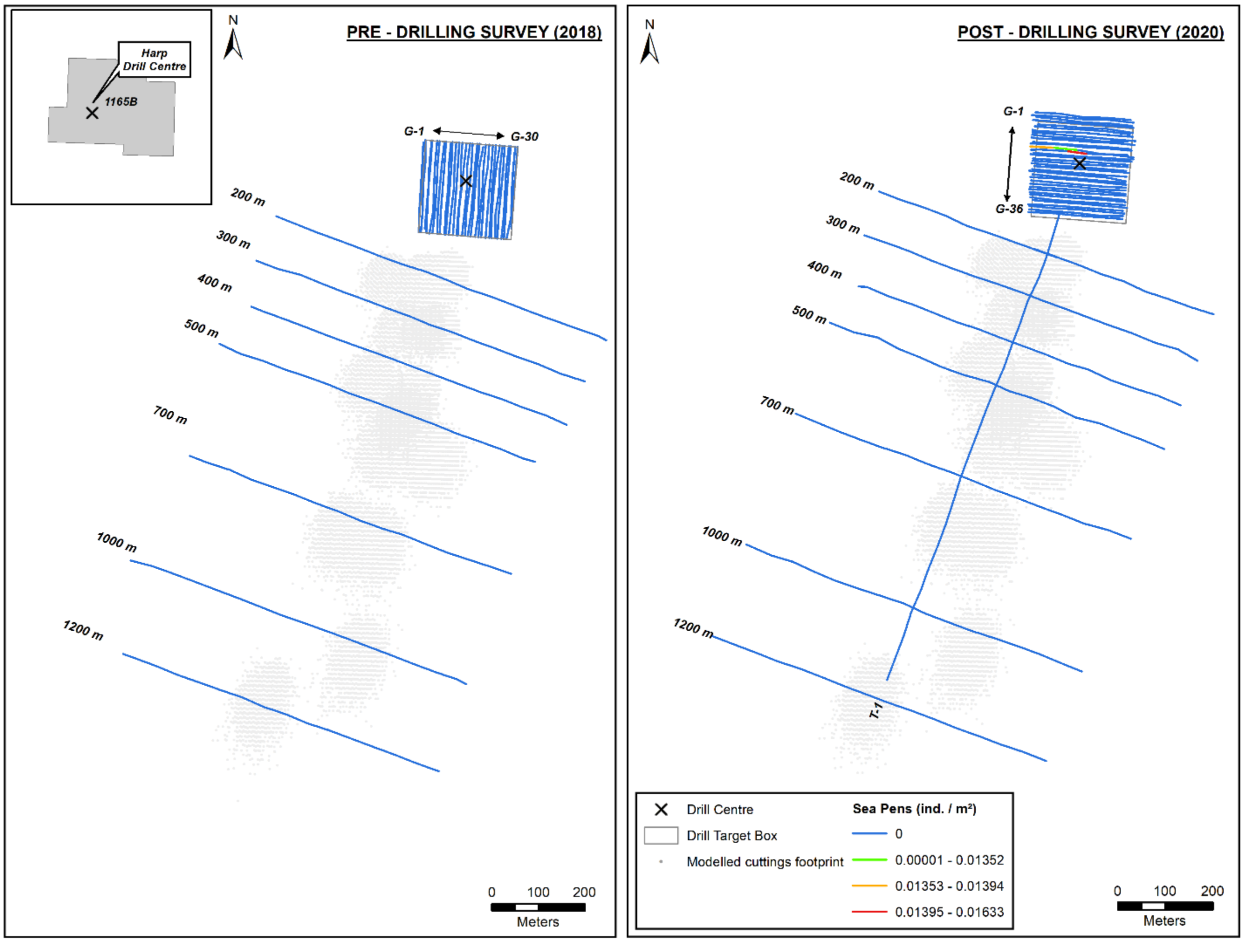


Figure 3-6 Summary of sea pen density from Harp in 2018 and 2020.

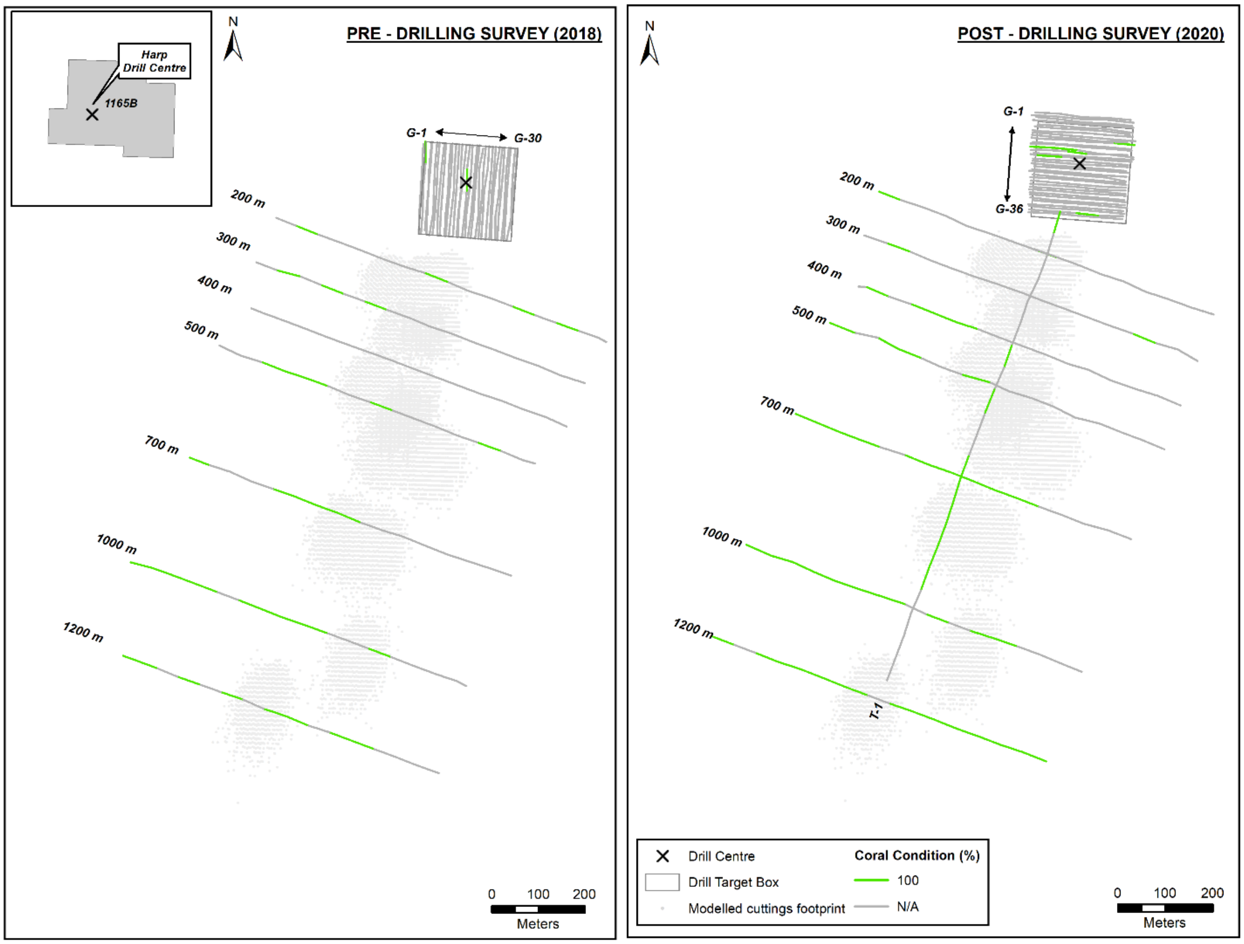


Figure 3-7 Summary of soft coral condition at Harp in 2018 and 2020.

3.2.2 Sponges

Sponges were abundant and observed throughout the 200 x 200 m survey grid and the predicted cuttings transects (Table 3-3). All sponge morphological groups were observed at least once (Figure 3-8, Figure 3-9, Figure 3-14). The most commonly observed sponge morphological groups were solid / massive, round with projections, and other (e.g., encrusting, finger sponges). Leaf / vase shaped sponges, thin-walled complex sponges, and stalked sponges were uncommonly observed throughout the survey area. Of the sponges observed, many appeared to have some sedimentation coverage in 2020, however it was not conclusive if this accumulation was from drill cuttings or natural occurrence (Figure 3-15, Figure 3-16). Sponges were also found in trenches possibly created by the anchor chains and did not appear to be detached or damaged in any way - though it can be difficult to see the point of attachment for finger sponges (Figure 3-8F).

Sponge data from 2018 was similar to 2020, with solid / massive as the most common group followed by other and round with projection sponges. Overall, average density for most sponge groups was lower in 2020 compared to 2018, with the exception of round with projection sponges. This may be partially caused by the different field of views between the two surveys, with 2018 generally having flown further up from the seabed. At a distance, round with projection sponges may appear to be solid / massive. Sponge condition was better in 2018 as well, with some sponges having sediment present on their surface, but the majority were in good condition (Figure 3-15, Figure 3-16).

Table 3-3 Summary statistics of sponge group density in the 200 x 200 m grid box and transect lines in 2018 and 2020.

Taxa Group	Area	Year	Mean	St. dev.	Median	Min	Max
Solid / Massive	Grid Lines	2018	0.120	0.150	0.077	0.007	1.297
		2020	0.100	0.150	0.042	0.013	0.964
	Transects	2018	0.308	0.191	0.280	0.021	0.846
		2020	0.113	0.156	0.043	0.012	0.656
Leaf / Vase Shaped	Grid Lines	2018	0.001	0.004	0	0.007	0.014
		2020	0.003	0.010	0	0.013	0.100
	Transects	2018	0.001	0.002	0	0.007	0.007
		2020	0.001	0.005	0	0.013	0.027
Round with Projections	Grid Lines	2018	0.004	0.014	0	0.007	0.112
		2020	0.082	0.130	0.028	0.013	1.022
	Transects	2018	0.002	0.006	0	0.007	0.035
		2020	0.073	0.108	0.028	0.013	0.708
Thin-Walled, Complex	Grid Lines	2018	<0.001	0.001	0	0.007	0.007
		2020	<0.001	0.001	0	0.014	0.014
	Transects	2018	<0.001	0.002	0	0.007	0.007
		2020	<0.001	0.002	0	0.007	0.015
Stalked	Grid Lines	2018	<0.001	0.001	0	0.014	0.014
		2020	<0.001	0.001	0	0.014	0.014
	Transects	2018	0	-	-	-	-
		2020	0	-	-	-	-
Other	Grid Lines	2018	0.076	0.103	0.042	0.007	0.677
		2020	0.046	0.092	0.014	0.012	0.782
	Transects	2018	0.152	0.125	0.126	0.007	0.657
		2020	0.030	0.048	0.006	0.013	0.261

Total number of survey sections: Grid Lines (2018 (n=120), 2020 (n=153)), Transects (2018 (n=107), 2020 (n=126))
Only sections above 10 m linear distance were included for summary statistics
Min is the smallest non-zero density value

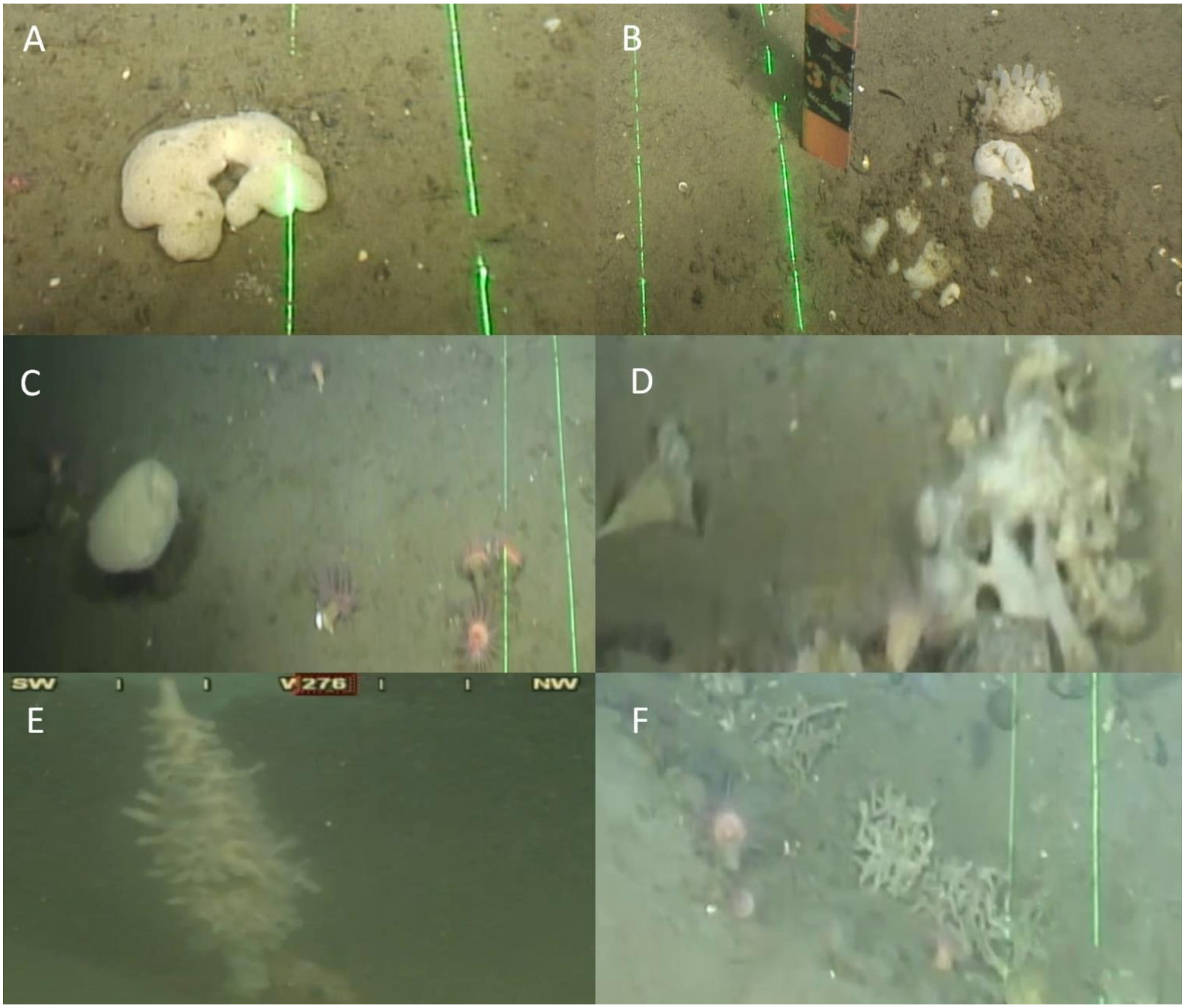


Figure 3-8 Representative photos from each sponge morphological group: A) Massive sponge, B) Round with projections, C) Leaf/Vase shaped, D) Thin-walled/Foliose, E) Stalked, and F) Other. Lasers are 10 cm apart.

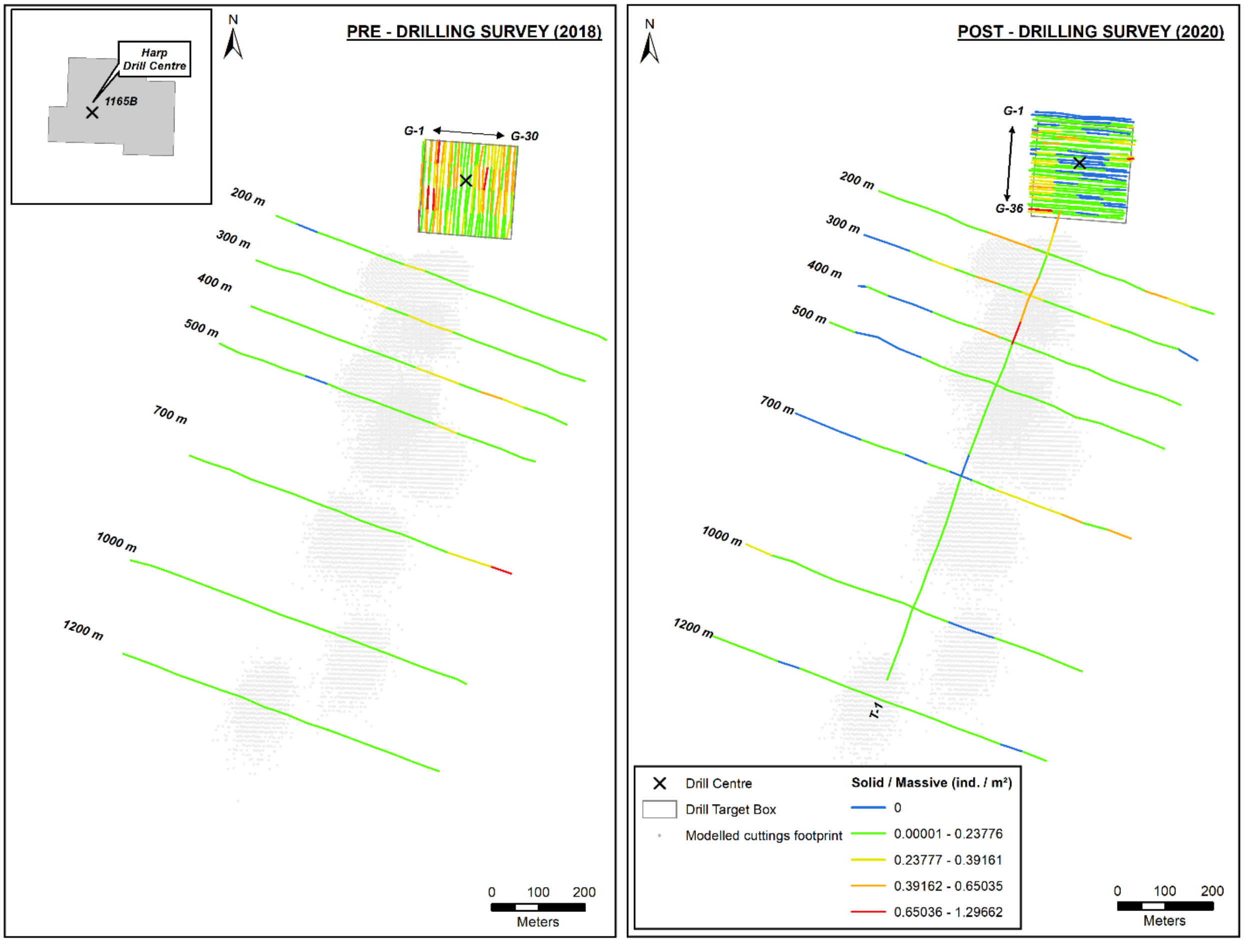


Figure 3-9 Summary of solid / massive sponge density from Harp in 2018 and 2020.

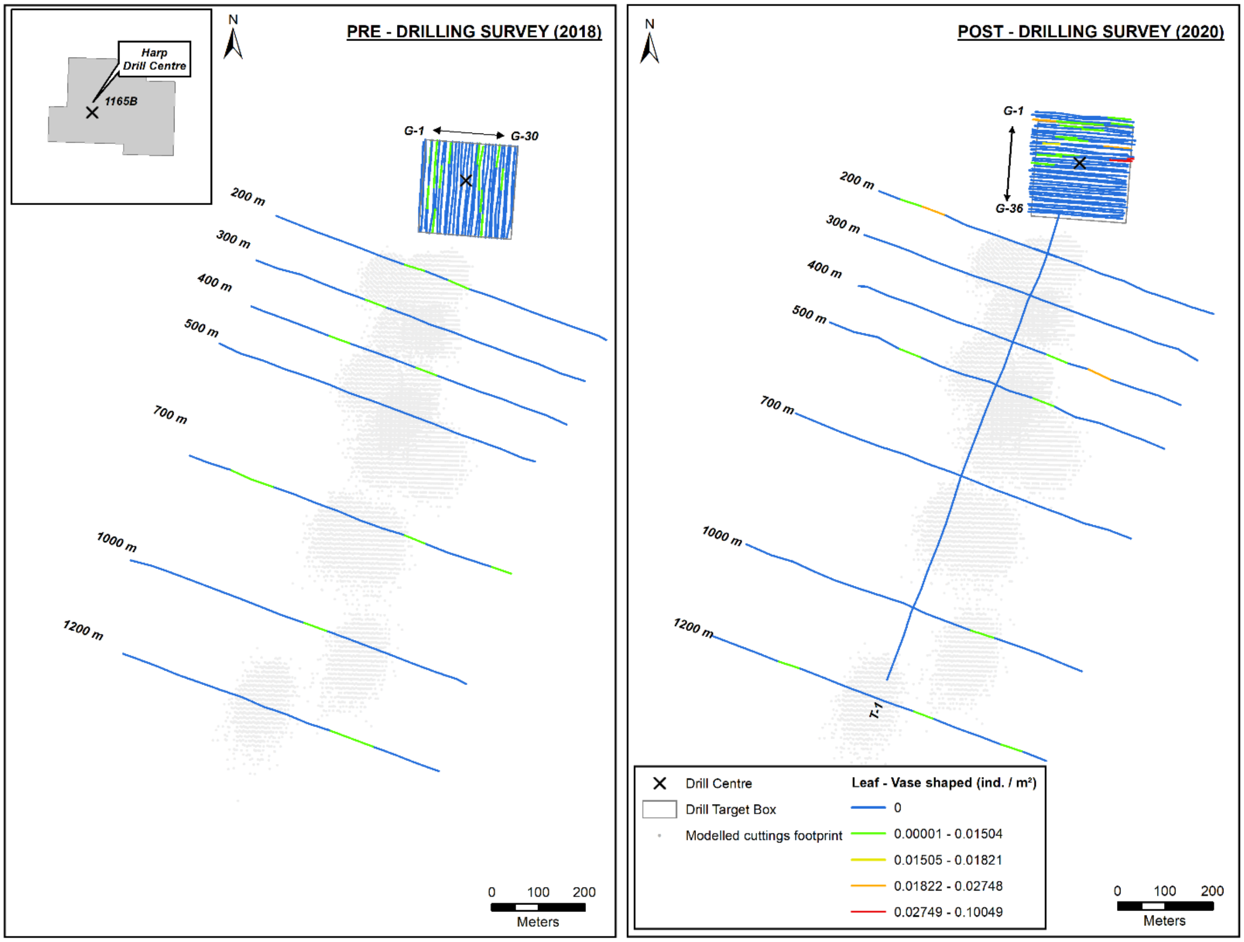


Figure 3-10 Summary of leaf / vase shaped sponge density from Harp in 2018 and 2020.

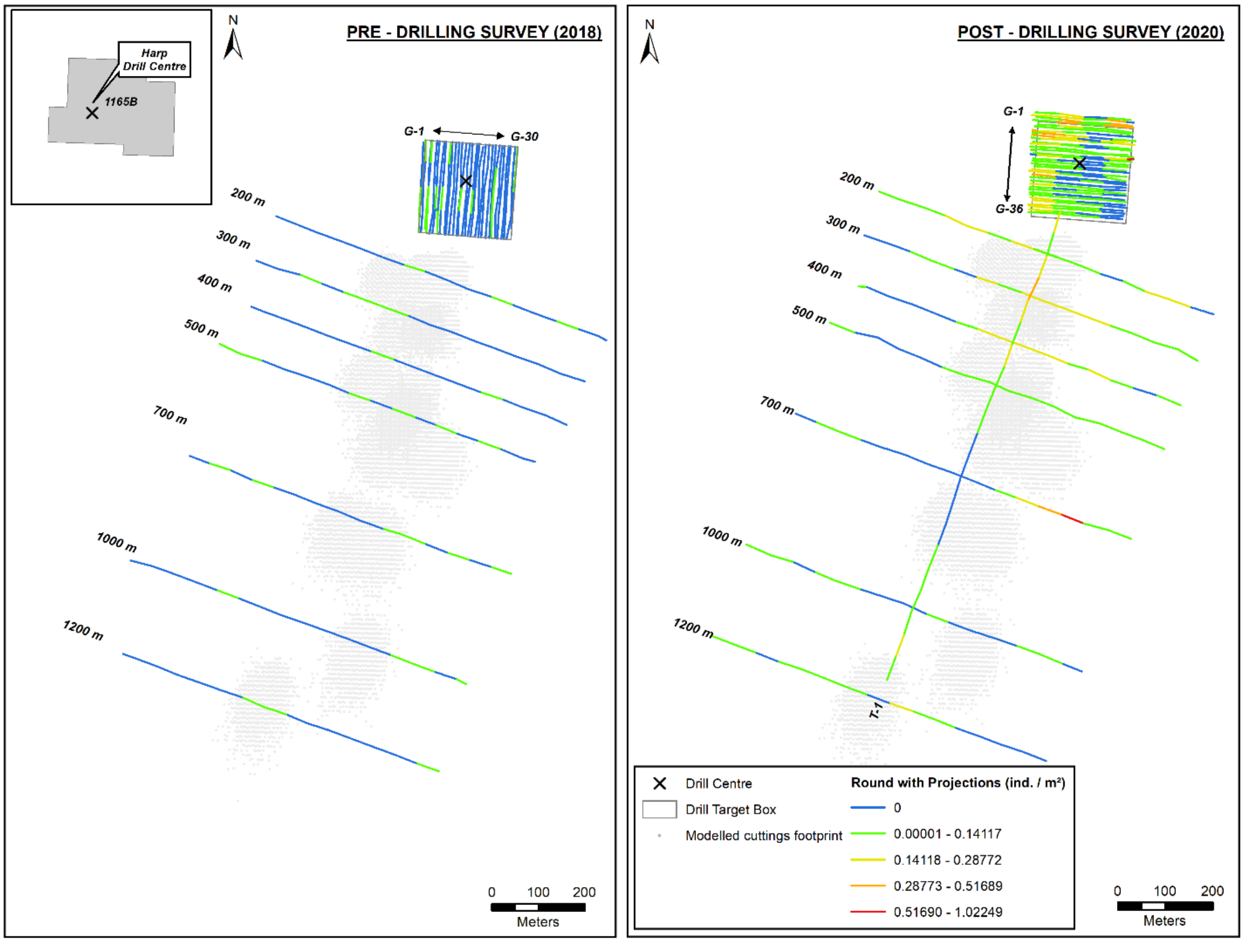


Figure 3-11 Summary of round with projection sponge density from Harp in 2018 and 2020.

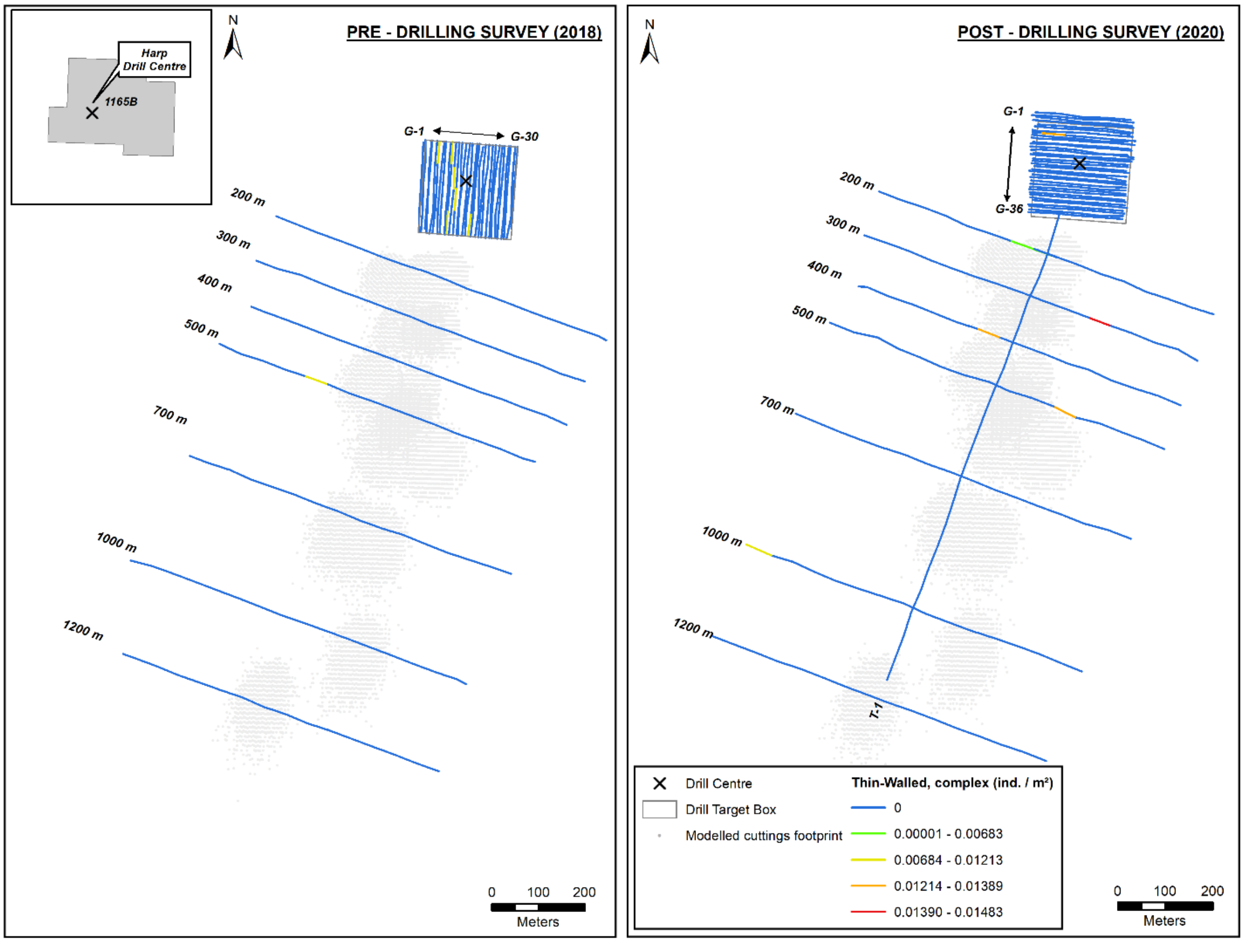


Figure 3-12 Summary of thin-walled, complex sponge density from Harp in 2018 and 2020.

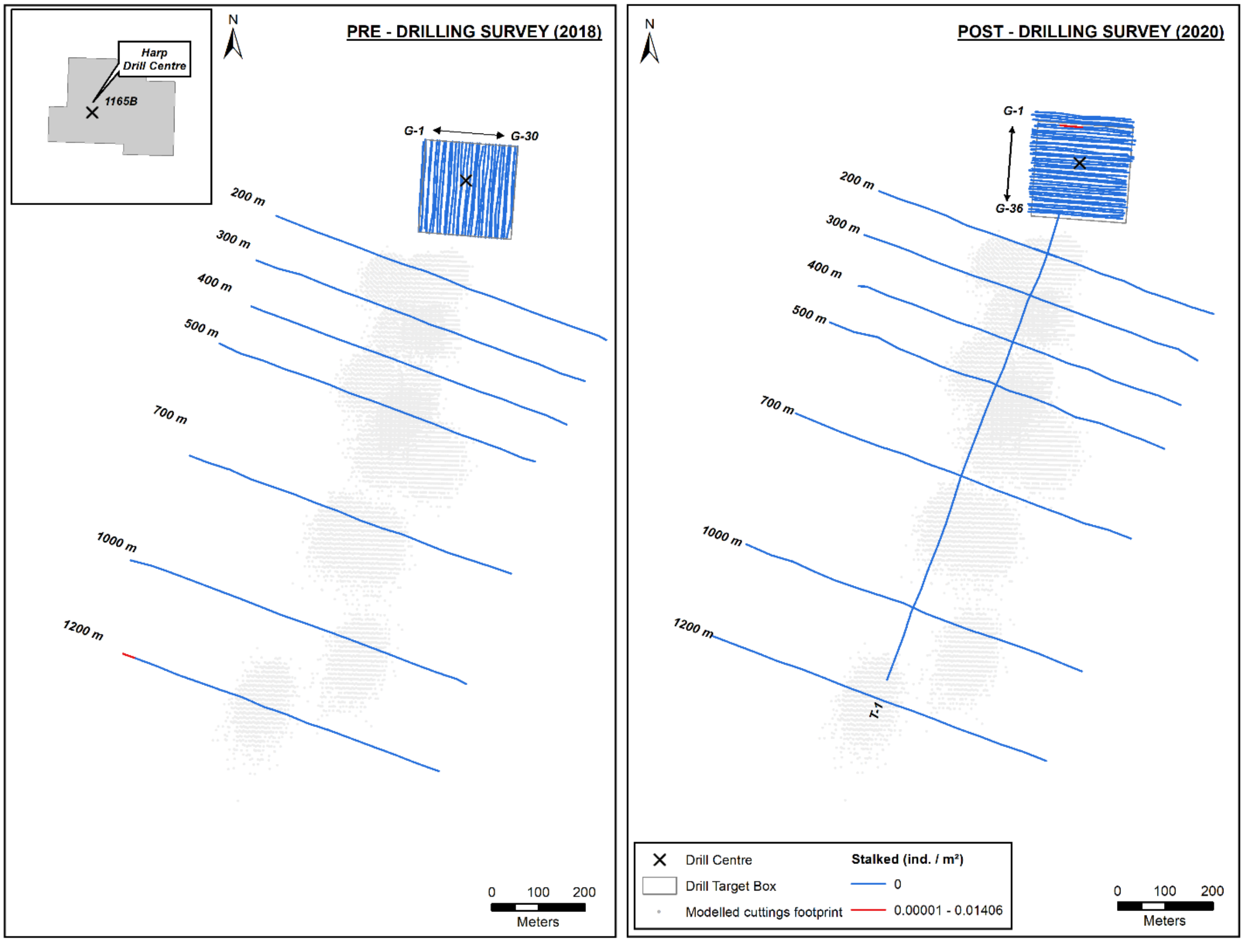


Figure 3-13 Summary of stalked sponge density from Harp in 2018 and 2020.

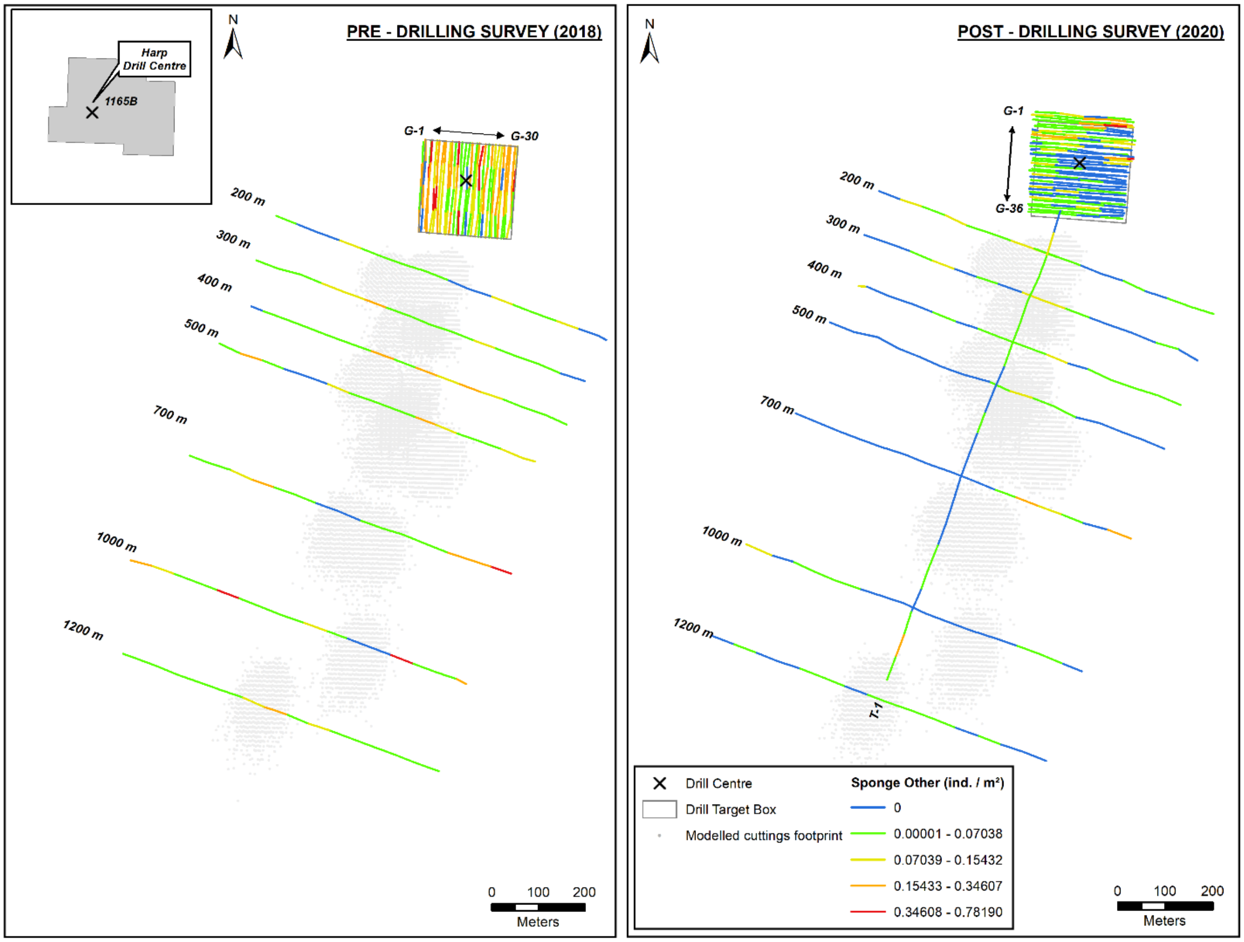


Figure 3-14 Summary of other sponge density from Harp in 2018 and 2020.

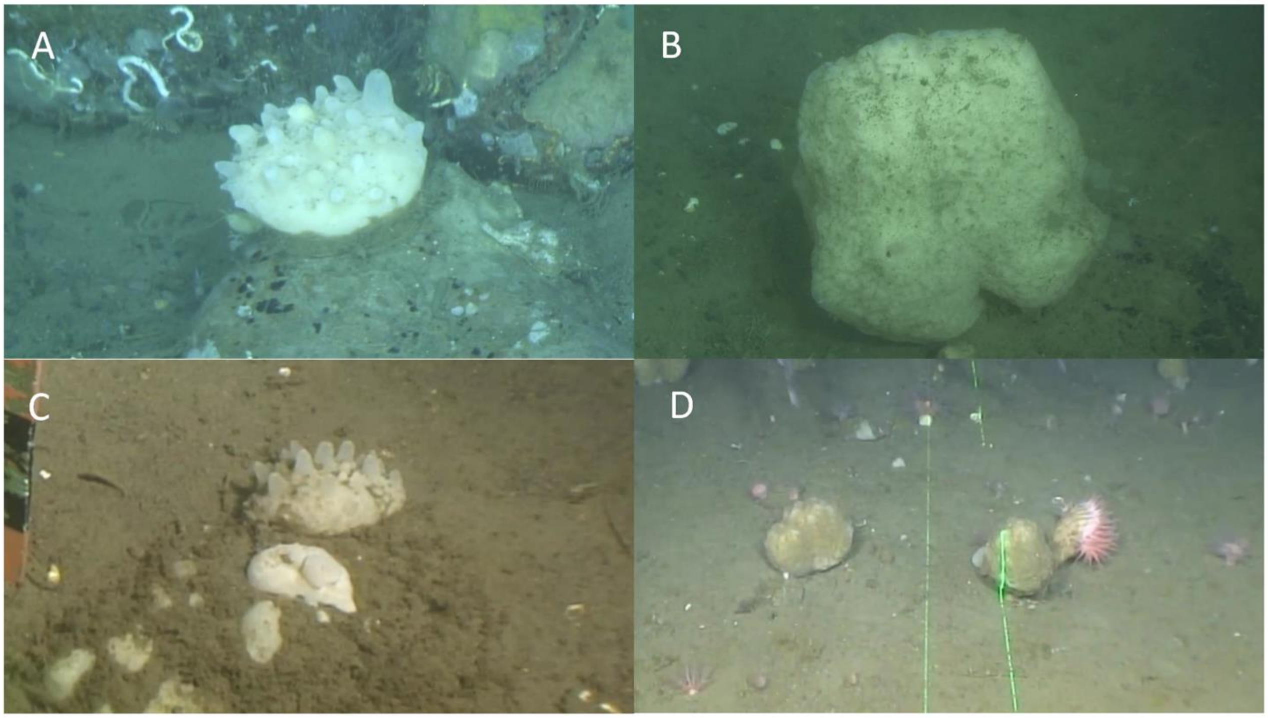


Figure 3-15 Examples of sponges from 2018 and 2020 showing various conditions: A) round with projections sponge with no surface sediment (2018), B) solid / massive sponge with light natural sediment (2018), C) round with projections sponge with some sediment present (2020), and D) solid / massive sponges with surface veneer (2020).

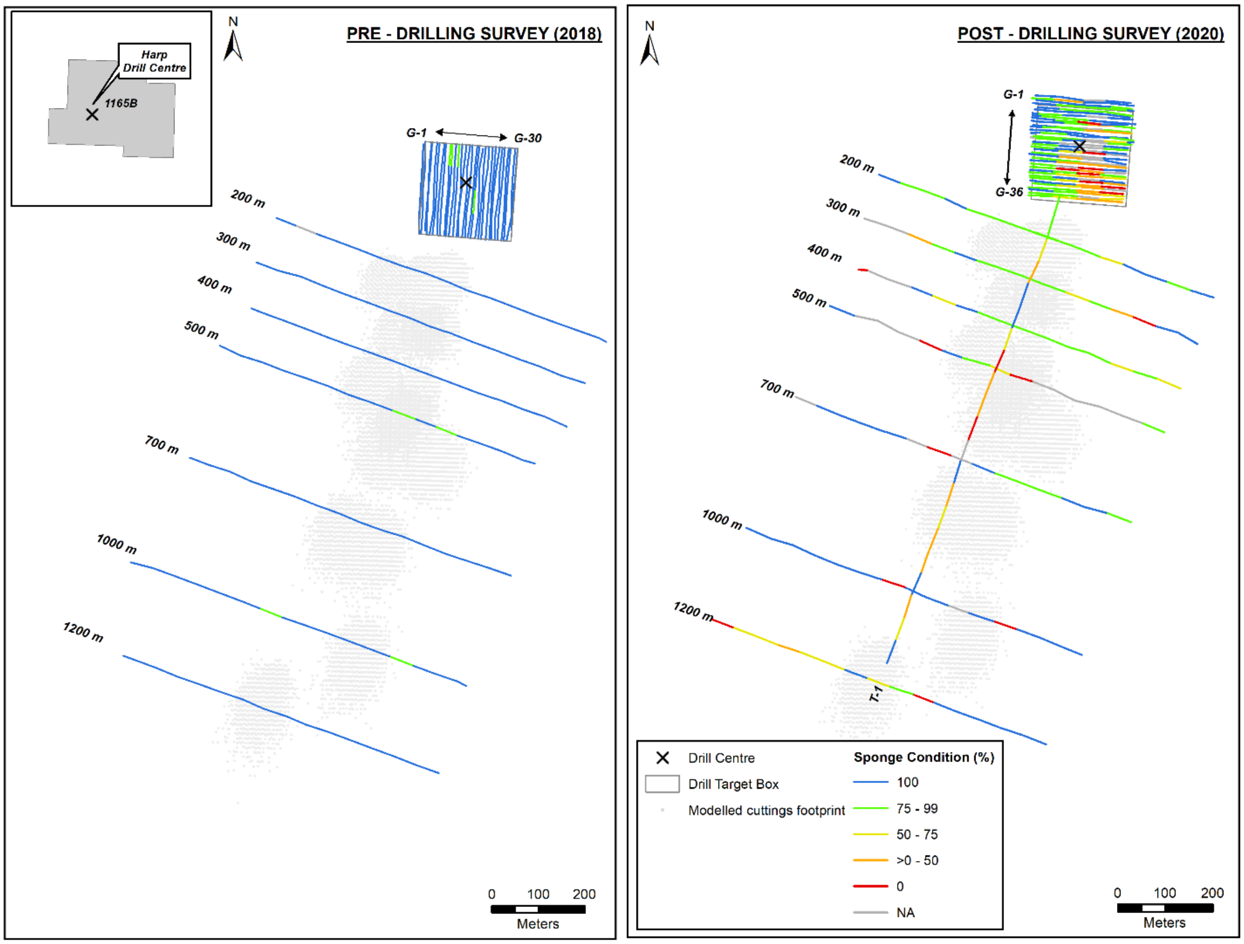


Figure 3-16 Summary of all sponge condition from Harp in 2018 and 2020.

3.3 Other Taxa

3.3.1 Invertebrates

Invertebrates were abundant throughout the 200 x 200 m survey grid and drill cuttings transect area in both 2018 and 2020 (Table 3-4, Figure 3-17). See Appendix C for density figures for invertebrates from 2018 and 2020. Cnidarians (excluding corals) were the most abundant animal taxa overall, with sea anemones as the dominant cnidarian group (Table 3-4). Echinoderms and arthropods were common throughout the area, with sea cucumbers and shrimp as the dominant groups, respectively. Other invertebrate groups, including ctenophores, annelids, and molluscs, were less common overall, with bivalve molluscs as the dominant group. Similar results were noted in 2018, with cnidarians (sea anemones) as the dominant invertebrate group overall, followed by arthropods (shrimp) and echinoderms (sea stars). Echinoderms and cnidarians had higher average densities in 2020 compared to 2018, while arthropods and other invertebrates were higher in 2018, though the standard deviations generally overlap for both averages.

Table 3-4 Summary statistics for invertebrate group density within the 200 x 200 m survey grid and cuttings transect areas in 2018 and 2020.

Taxa Group	Area	Year	Mean	St. dev.	Median	Min	Max
Echinoderms	Grid Lines	2018	0.013	0.012	0.014	0.007	0.073
		2020	0.042	0.051	0.028	0.013	0.353
	Transects	2018	0.013	0.012	0.011	0.007	0.056
		2020	0.207	0.409	0.069	0.013	3.880
Cnidarians	Grid Lines	2018	0.393	0.260	0.336	0.021	1.763
		2020	1.691	1.020	1.630	0.014	6.436
	Transects	2018	0.573	0.266	0.531	0.084	1.483
		2020	2.114	1.493	1.704	0.356	7.322
Arthropods	Grid Lines	2018	0.385	0.513	0.189	0.007	2.986
		2020	0.155	0.395	0.014	0.012	2.822
	Transects	2018	0.231	0.381	0.072	0.007	2.259
		2020	0.190	0.480	0.028	0.012	2.957
Other Invertebrates	Grid Lines	2018	0.039	0.043	0.025	0.007	0.224
		2020	0.023	0.046	0	0.012	0.228
	Transects	2018	0.021	0.030	0.007	0.007	0.161
		2020	0.017	0.067	0	0.013	0.613
Total number of survey sections: Grid Lines (2018 (n=120), 2020 (n=153)), Transects (2018 (n=107), 2020 (n=126)) Only sections above 10 m linear distance were included for summary statistics Min is the smallest non-zero density value							

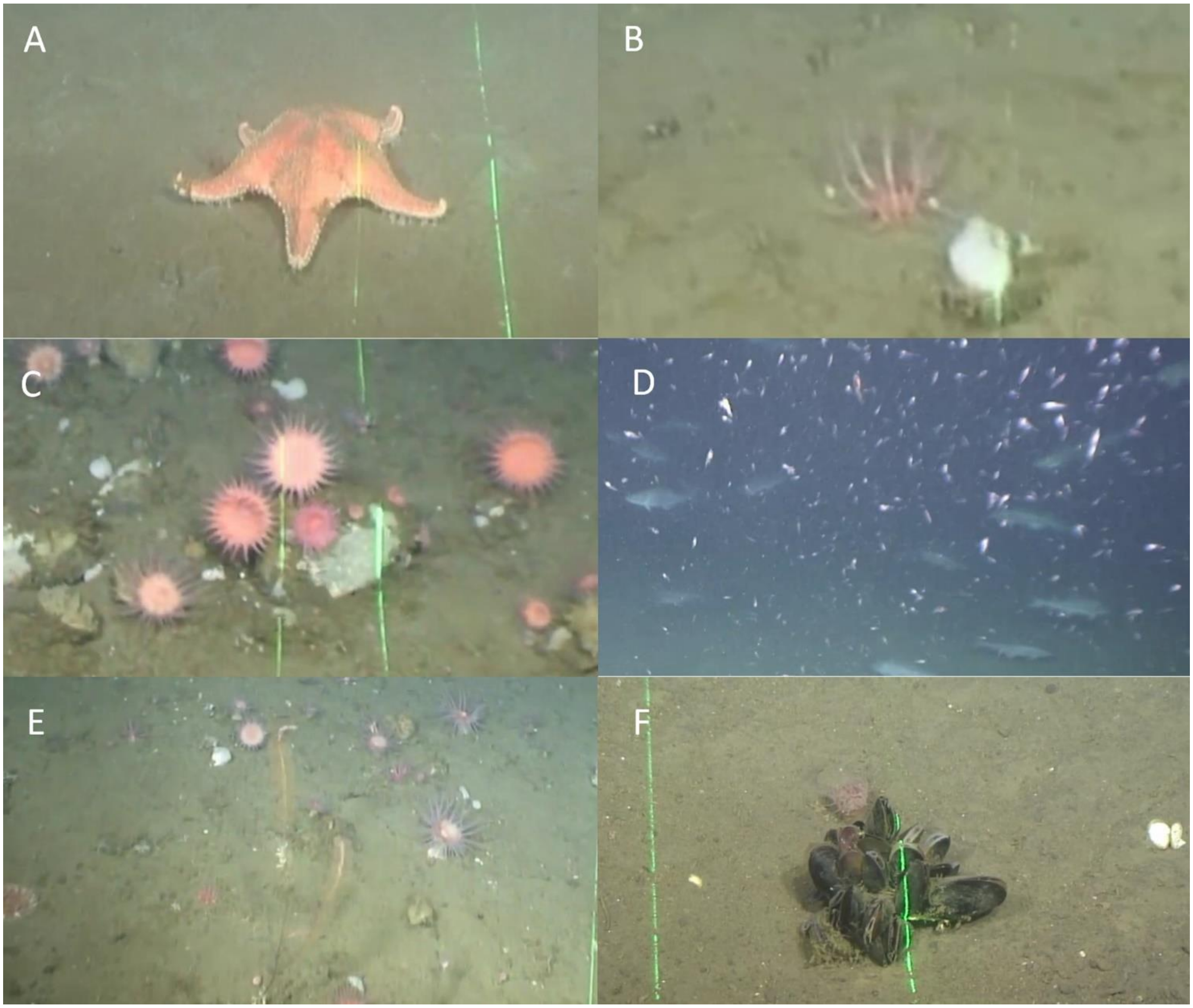


Figure 3-17 Representative invertebrates from each species group: A) sea star (echinoderm), B) sea cucumber (echinoderm), C) anemones (cnidarian), D) shrimp in foreground (arthropod), E) hydroid (cnidarian), and F) bivalves (mollusc / other invertebrate).

3.3.2 Fish

Fish species, especially Atlantic cod, were found throughout the grid line and cuttings transects areas (Figure 3-18). See Appendix C for density figures for fish groups from 2018 and 2020. Atlantic cod (a piscivore) were counted as the maximum number visible on a given line to avoid over-counting the same fish and were the most abundant fish species overall with up to 73 cod visible at once (Table 3-5). Plank-piscivores were the second most abundant group, with redfish species as the only identified group. Benthivores were the next most common group, with rockling species as the most abundant taxa. Low numbers of piscivores (aside from Atlantic cod) such as Greenland halibut, and planktivores (only lanternfish) were observed. Unknown fish were those unable to be assigned to a functional group, such as poorly seen fish or small juveniles. Only one *Species at Risk Act* (SARA) listed species, the Atlantic wolffish, was observed at Harp L-42, with two individuals noted within the grid line box. Similar results were noted in 2018, with Atlantic cod as the most abundance group overall, followed by plank-piscivores and benthivores.

Table 3-5 Summary statistics for fish functional group density and Atlantic cod within the 200 x 200 m survey grid and cuttings transects in 2018 and 2020.

Taxa Group	Area	Year	Mean	St. dev.	Median	Min	Max
Atlantic Cod (Max n)	Grid Lines	2018	15.1	12.7	11	1	41
		2020	26.4	15.4	24	5	73
	Transects	2018	30.2	11.1	27.5	11	57
		2020	32.6	18.6	31	12	70
Benthivores	Grid Lines	2018	0.008	0.008	0.007	0.007	0.035
		2020	0.003	0.007	0	0.012	0.043
	Transects	2018	0.002	0.004	0	0.007	0.021
		2020	0.020	0.022	0.014	0.013	0.086
Piscivores	Grid Lines	2018	0.001	0.002	0	0.007	0.008
		2020	0.001	0.004	0	0.012	0.028
	Transects	2018	<0.001	0.001	0	0.007	0.007
		2020	0.002	0.008	0	0.013	0.055
Plank-Piscivores	Grid Lines	2018	0.025	0.049	0.007	0.007	0.287
		2020	0.022	0.046	0.013	0.012	0.028
	Transects	2018	0.037	0.059	0.014	0.007	0.385
		2020	0.009	0.014	0	0.013	0.058
Planktivores	Grid Lines	2018	<0.001	0.001	0	0.007	0.007
		2020	0	-	-	-	-
	Transects	2018	0	-	-	-	-
		2020	0	-	-	-	-
Unknown / Unidentified	Grid Lines	2018	0.001	0.003	0	0.007	0.014
		2020	0.002	0.005	0	0.013	0.028
	Transects	2018	<0.001	0.002	0	0.007	0.007
		2020	0.003	0.006	0	0.013	0.028

Total number of survey sections: Grid Lines (2018 (n=120), 2020 (n=153)), Transects (2018 (n=107), 2020 (n=126))
Only sections above 10 m linear distance were included for summary statistics
Min is the smallest non-zero density value

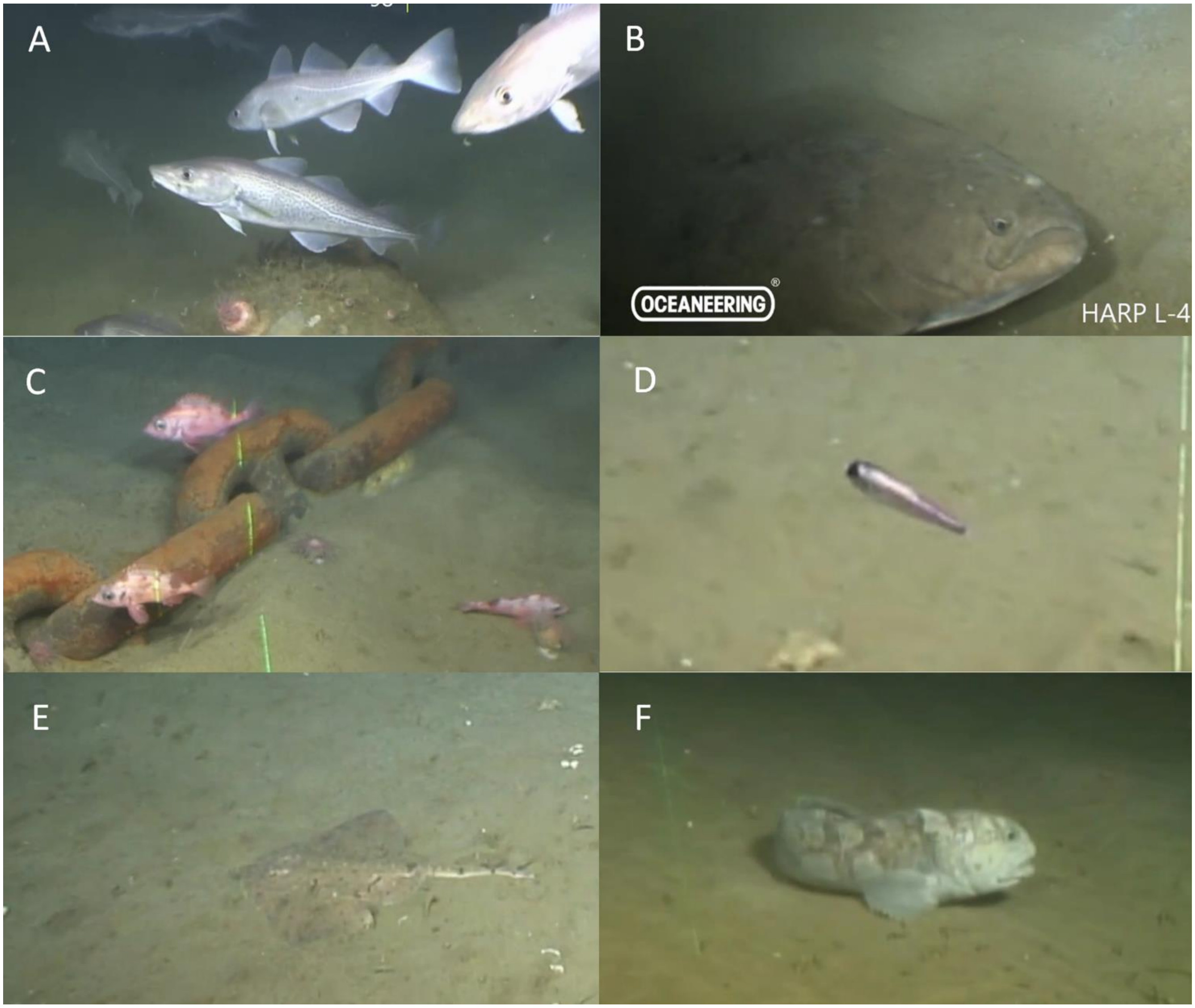


Figure 3-18 Representative fish species from each fish functional group: A) Atlantic cod (piscivore), B) Greenland halibut (piscivore), C) redfish (plank-piscivore), D) lanternfish (planktivore), E) skate (benthivore), and F) Atlantic wolffish (benthivore).

4.0 SUMMARY AND CONCLUSIONS

The drill cuttings survey collected benthic video imagery covering 13.65 km of the seafloor. The center position of the post-drilling survey differed slightly from the pre-drilling as the final drill center was moved to the northwest. However, the two survey areas did overlap and could be compared. Based on the results summarized above, some general conclusions can be drawn related to the Conditions 3.12.2.2, and 3.12.2.3 of the Decision Statement. The specific conditions and the determination are provided below.

Condition 3.12.1 *– for every well, measure the concentration of synthetic-based drilling fluids retained on discharged drilling cuttings as described in the Offshore Waste Treatment Guidelines (OWTG) to verify that the discharge meets the minimum limits set out in the Guidelines (and any applicable legislative requirements) and report the results to the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB);*

This condition is discussed in the EL1165B Drill Cutting Monitoring Report. The report describes how primary mitigation measures were sufficient and secondary mitigation measures were not required.

Condition 3.12.2.1 *- measurement of sediment deposition extent and thickness post-drilling to verify the drill waste deposition modeling predictions;*

This condition is discussed in the EL1165B Drill Cutting Monitoring Report. The report concluded that the cuttings observed were within the extent of the model's predictions and typically closer to the wellhead.

Condition 3.12.2.2 *- Benthic fauna surveys to verify the effectiveness of mitigation measures;*

Mitigations in place to reduce the potential harm from drilling activities to deep-sea corals included the drill center be offset 100-m from any coral colony defined by the C-NLOPB coral guidance. The pre-drilling survey implemented this mitigation and did not find any C-NLOPB defined coral colonies (RPS 2018). Other mitigations include assessing the presence and condition of corals within the survey area post-drilling and assess whether these results change the conclusion of the original environmental assessment. Coral abundances and distributions were similar to those observed in the pre-drilling survey with a majority of the corals occurring outside of the 200 x 200 m survey grid. Coral condition was assessed and appeared to be in good condition (e.g., upright and without visible sedimentation). Sponges had a similar distribution in the post-drilling survey as in the pre-drilling with similar species present. Sponges with veneers present or covered sponges had a higher incidence in the 2020 survey compared to the 2018. Within the 200 x 200 m grid box, the higher incidence may be due to drill cuttings as the majority of affected sponges are to the south and east which coincides with the cuttings noted (see Wood 2020a). In the predicted cuttings transects, this may be natural sediment stirred up by the setting and removing of the anchor chains. No distinction was made between natural sedimentation and drill cuttings due to difficulty in identification (see Wood 2020a). Epibenthic megafauna were observed throughout the survey area including several species of fish and invertebrates. With the similarity in coral and sponge abundances and distributions in the pre- and post- drilling surveys, it is therefore concluded that the drilling activities observed (with mitigation measures in place) were within what was predicted by the model and the EIS.

Condition 3.12.2.3 *– Report the information collected as identified in conditions 3.12.2.1 and 3.12.2.2, including a comparison of modelling results to in situ results, to the C-NLOPB within 60 days following the drilling of the first well in each exploration licence.*

As identified directly above and in the preceding sections of this report, pre-drilling survey results were compared to *in situ* results and found that effects to corals and sponges from drilling activities were as predicted.

5.0 CLOSURE

This report of the biological environment observed at EL 1165B has been prepared for the exclusive use of ExxonMobil Canada Ltd.. The project was conducted using standard practices by qualified Wood staff and in accordance with verbal and written requests from the client.

Yours sincerely,

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APPENDIX A: SURVEY COORDINATES

Table A-1 Start and end coordinates for the central box grid and radial transects surveyed in EL 1165B in 2020

Transect	Length (m)	UTM Coordinates (NAD83, Zone 22)			
		Start Northing	Start Easting	End Northing	End Easting
200 x 200m Survey Grid Lines					
G-01	200	5270350.254	773138.096	5270351.521	772933.202
G-02	200	5270344.254	772930.508	5270345.135	773144.748
G-03	200	5270337.785	773142.148	5270340.959	772932.331
G-04	200	5270334.083	772933.487	5270334.437	773144.666
G-05	200	5270323.14	773144.869	5270325.99	772936.478
G-06	200	5270321.301	772938.078	5270320.093	773139.272
G-07	200	5270315.216	773145.755	5270313.286	772934.218
G-08	200	5270306.326	773151.731	5270308.218	772934.152
G-09	200	5270303.401	772934.075	5270305.349	773141.699
G-10	200	5270298.029	773150.772	5270297.503	772933.38
G-11	200	5270288.284	772937.514	5270290.891	773146.493
G-12	200	5270286	773145.512	5270284.488	772932.651
G-13	200	5270277.871	772932.524	5270278.203	773144.497
G-14	200	5270272.189	773150.284	5270271.033	772934.237
G-15	200	5270266.874	772939.656	5270268.633	773150.844
G-16	200	5270263.449	773146.408	5270262.564	772934.971
G-17	200	5270255.278	772940.299	5270255.354	773141.021
G-18	200	5270250.721	773140.224	5270247.732	772937.001
G-19	200	5270243.425	772937.68	5270242.359	773136.851
G-20	200	5270238.658	773143.288	5270237.902	772936.876
G-21	200	5270230.654	772939.619	5270230.488	773138.705
G-22	200	5270224.23	773144.385	5270227.167	772933.751
G-23	200	5270220.349	772940.576	5270217.214	773136.739
G-24	200	5270214.327	773140.267	5270213.982	772937.04
G-25	200	5270207.493	772938.7992	5270207.184	773139.045
G-26	200	5270201.226	773139.881	5270201.076	772939.041
G-27	200	5270193.961	772937.821	5270194.511	773139.215
G-28	200	5270190.044	773140.321	5270188.576	772936.419
G-29	200	5270182.462	772938.755	5270182.045	773137.856
G-30	200	5270178.456	773140.944	5270177.927	772939.481
G-31	200	5270171.459	772940.029	5270170.694	773140.229
G-32	200	5270165.193	773145.41	5270165.009	772937.851
G-33	200	5270158.368	772938.576	5270158.28	773137.359
G-34	200	5270154.154	773140.233	5270153.536	772939.298
G-35	200	5270146.55	772939.301	5270147.125	773138.182

G-36	200	5270141.908	773138.223	5270140.184	772938.96
Predicted Drill Cuttings Deposition Area Transects					
T-1	1200	5270243.034	773038.738	5269096.106	772709.441
T-200 m	750	5270159.463	772623.358	5269954.132	773347.433
T-300 m	750	5269856.813	773317.478	5270067.779	772594.454
T-400 m	750	5269971.649	772568.236	5269761.322	773288.077
T-500 m	750	5269666.68	773262.154	5269875.928	772540.335
T-700 m	750	5269682.218	772484.749	5269471.573	773207.759
T-1000 m	750	5269186.706	773125.088	5269397.173	772403.023
T-1200 m	750	5269200.901	772345.618	5268991.336	773069.758

APPENDIX B: 2020 DENSITY DATA

EL 1165B Harp 2020 Benthic Survey Data

Date	Line	Section	Actual Time Start	Actual Time End	Start Easting	Start Northing	End Easting	End Northing	Substrate (% Cover) Bedrock	Coarse	Medium	Fine	Organic Detritus	Shell	Distance (m)	Area (sqm) 1.44 m FOV
04-May-20	G1	1	23:46:48	23:49:01	773138.07	5270350.30	773086.90	5270350.59	0	10	0	90	0	0	51.2	73.7
04-May-20	G1	2	23:49:01	23:53:48	773086.90	5270350.59	773038.33	5270348.02	0	5	0	95	0	0	48.6	70.0
04-May-20	G1	3	23:53:48	23:55:00	773038.33	5270348.02	772986.60	5270351.64	0	5	0	95	0	0	51.9	74.7
04-May-20	G1	4	23:55:00	23:58:14	772986.60	5270351.64	772937.57	5270350.52	0	10	0	90	0	0	49.0	70.6
04-May-20	G2	1	23:28:23	23:31:41	772930.45	5270344.25	772979.75	5270345.44	0	10	0	90	0	0	49.3	71.0
04-May-20	G2	2	23:31:41	23:34:30	772979.75	5270345.44	773040.07	5270343.87	0	0	0	100	0	0	60.3	86.9
04-May-20	G2	3	23:34:30	23:37:49	773040.07	5270343.87	773086.99	5270347.00	0	10	0	90	0	0	47.0	67.7
04-May-20	G2	4	23:37:49	23:40:02	773086.99	5270347.00	773131.10	5270345.27	0	10	0	90	0	0	44.1	63.6
04-May-20	G2	5	23:40:02	23:40:26	773131.10	5270345.27	773144.91	5270345.08	0	5	0	95	0	0	13.8	19.9
04-May-20	G3	1	23:04:25	23:09:13	773142.14	5270337.78	773096.00	5270339.31	0	15	0	85	0	0	46.2	66.5
04-May-20	G3	2	23:09:13	23:12:26	773096.00	5270339.31	773038.13	5270337.56	0	10	0	90	0	0	57.9	83.4
04-May-20	G3	3	23:12:26	23:15:20	773038.13	5270337.56	772990.88	5270340.21	0	5	0	95	0	0	47.3	68.1
04-May-20	G3	4	23:15:20	23:17:46	772990.88	5270340.21	772940.24	5270341.14	0	0	0	100	0	0	50.6	72.9
04-May-20	G4	1	23:43:01	22:47:12	772933.38	5270334.04	772983.91	5270334.54	0	5	0	95	0	0	50.5	72.8
04-May-20	G4	2	22:47:12	22:50:10	772983.91	5270334.54	773032.00	5270334.23	0	5	0	95	0	0	48.1	69.2
04-May-20	G4	3	22:50:10	22:54:06	773032.00	5270334.23	773083.82	5270334.17	0	15	0	85	0	0	51.8	74.6
04-May-20	G4	4	22:54:06	22:56:31	773083.82	5270334.17	773133.01	5270334.18	0	15	0	85	0	0	49.2	70.8
04-May-20	G4	5	22:56:31	22:56:50	773133.01	5270334.18	773144.85	5270334.26	0	5	0	95	0	0	11.8	17.0
04-May-20	G5	1	22:12:55	22:18:01	773144.81	5270323.13	773087.29	5270327.89	0	10	0	90	0	0	57.7	83.1
04-May-20	G5	2	22:18:01	22:22:52	773087.29	5270327.89	773038.00	5270326.02	0	5	0	95	0	0	49.3	71.0
04-May-20	G5	3	22:22:52	22:30:49	773038.00	5270326.02	772988.60	5270326.51	0	5	0	95	0	0	49.4	71.1
04-May-20	G5	4	22:30:49	22:32:56	772988.60	5270326.51	772944.29	5270325.83	0	5	0	95	0	0	44.3	63.8
04-May-20	G6	1	21:43:19	21:47:36	772938.23	5270321.31	772989.00	5270320.67	0	5	0	95	0	0	50.8	73.1
04-May-20	G6	2	21:47:36	21:50:54	772989.00	5270320.67	773038.42	5270321.95	0	5	0	95	0	0	49.4	71.2
04-May-20	G6	3	21:50:54	21:53:30	773038.42	5270321.95	773086.54	5270322.46	0	10	0	90	0	0	48.1	69.3
04-May-20	G6	4	21:53:30	21:59:24	773086.54	5270322.46	773138.65	5270319.82	0	5	0	95	0	0	52.2	75.1
04-May-20	G7	1	21:10:47	21:17:31	773145.41	5270315.31	773094.05	5270315.15	0	10	0	90	0	0	51.4	74.0
04-May-20	G7	2	21:17:31	21:20:53	773094.05	5270315.15	773045.05	5270315.53	0	10	0	90	0	0	49.0	70.6
04-May-20	G7	3	21:20:53	21:25:07	773045.05	5270315.53	772995.30	5270313.43	0	10	0	90	0	0	49.8	71.7
04-May-20	G7	4	21:25:07	21:29:21	772995.30	5270313.43	772945.39	5270311.93	0	15	5	80	0	0	49.9	71.9
04-May-20	G7	5	21:29:21	21:30:21	772945.39	5270311.93	772934.22	5270313.26	0	0	0	100	0	0	11.2	16.2
04-May-20	G8	1	20:13:01	20:17:42	773151.73	5270306.33	773101.73	5270306.76	0	5	0	95	0	0	50.0	72.0
04-May-20	G8	2	20:17:42	20:22:23	773101.73	5270306.76	773051.73	5270307.20	0	10	0	90	0	0	50.0	72.0
04-May-20	G8	3	20:22:23	20:27:04	773051.73	5270307.20	773001.74	5270307.63	0	10	0	90	0	0	50.0	72.0
04-May-20	G8	4	20:27:04	20:31:45	773001.74	5270307.63	772951.74	5270308.07	0	10	0	90	0	0	50.0	72.0
04-May-20	G8	5	20:31:45	20:33:26	772951.74	5270308.07	772934.15	5270308.22	0	10	0	90	0	0	17.6	25.3
03-May-20	G9	1	21:01:14	21:04:17	772933.96	5270303.40	772985.07	5270301.99	0	20	0	80	0	0	51.1	73.6
03-May-20	G9	2	21:04:17	21:09:55	772985.07	5270301.99	773031.65	5270302.19	0	15	0	85	0	0	46.6	67.1
03-May-20	G9	3	21:09:55	21:12:39	773031.65	5270302.19	773081.04	5270300.61	0	10	0	90	0	0	49.4	71.2
03-May-20	G9	4	21:12:39	21:15:13	773081.04	5270300.61	773135.11	5270304.12	0	5	5	90	0	0	54.2	78.0
03-May-20	G10	1	20:33:21	20:38:11	773150.76	5270298.00	773104.46	5270299.38	0	10	0	90	0	0	46.3	66.7
03-May-20	G10	2	20:38:11	20:41:08	773104.46	5270299.38	773050.81	5270297.78	0	15	0	85	0	0	53.7	77.3
03-May-20	G10	3	20:41:08	20:47:28	773050.81	5270297.78	773000.97	5270298.15	0	15	0	85	0	0	49.8	71.8
03-May-20	G10	4	20:47:28	20:49:54	773000.97	5270298.15	772951.40	5270295.92	0	15	0	85	0	0	49.6	71.5
03-May-20	G10	5	20:49:54	20:52:04	772951.40	5270295.92	772933.23	5270297.50	0	10	0	90	0	0	18.2	26.3
03-May-20	G11	1	20:07:53	20:11:34	772937.38	5270288.22	772987.58	5270288.13	0	10	0	90	0	0	50.2	72.3
03-May-20	G11	2	20:11:34	20:13:50	772987.58	5270288.13	773036.62	5270288.70	0	5	0	95	0	0	49.0	70.6
03-May-20	G11	3	20:13:50	20:16:09	773036.62	5270288.70	773087.19	5270289.58	0	5	0	95	0	0	50.6	72.8
03-May-20	G11	4	20:16:09	20:18:24	773087.19	5270289.58	773142.92	5270288.73	0	15	0	85	0	0	55.7	80.3
03-May-20	G12	1	19:41:55	19:49:25	773145.33	5270285.96	773096.42	5270286.42	0	10	0	90	0	0	48.9	70.4
03-May-20	G12	2	19:49:25	19:54:57	773096.42	5270286.42	773044.64	5270285.67	0	5	0	95	0	0	51.8	74.6
03-May-20	G12	3	19:54:57	19:57:45	773044.64	5270285.67	772993.18	5270287.02	0	5	0	95	0	0	51.5	74.1
03-May-20	G12	4	19:57:45	19:59:33	772993.18	5270287.02	772955.08	5270285.66	0	10	0	90	0	0	38.1	54.9
03-May-20	G12	5	19:59:33	20:01:27	772955.08	5270285.66	772932.52	5270284.48	0	5	0	95	0	0	22.6	32.5
03-May-20	G13	1	19:22:14	19:25:58	772932.38	5270277.89	772982.18	5270279.60	0	15	0	85	0	0	49.8	71.8
03-May-20	G13	2	19:25:58	19:27:48	772982.18	5270279.60	773033.52	5270278.08	0	5	0	95	0	0	51.4	74.0

Density by Group (Ind/m²)

Line	Section	Echinoderms	Cnidaria	Arthropods	Brachiopods	Other Inverts	Soft Corals	Black Corals	Hard Corals	Branching corals	Sea Pens	Solid / Massive	Leaf / Vase Shaped	Round with Projections	Thin-Walled, Complex	Stalked	Sponge Other	Benthivores	Piscivores	Plank-Piscivore	Planktivores	Unknown
G1	1	0.056	2.778	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.000	0.000	0.046	0.000	0.014	0.000	0.000	0.000
G1	2	0.000	0.243	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G1	3	0.000	2.973	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.161	0.000	0.000	0.094	0.000	0.000	0.000	0.000	0.000
G1	4	0.000	1.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.071	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000
G2	1	0.000	2.577	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.225	0.000	0.000	0.113	0.000	0.000	0.014	0.000	0.000
G2	2	0.000	0.242	0.012	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.288	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000
G2	3	0.015	1.477	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.103	0.000	0.000	0.177	0.000	0.000	0.030	0.000	0.000
G2	4	0.126	2.517	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.393	0.000	0.000	0.346	0.000	0.000	0.016	0.000	0.000
G2	5	0.000	2.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.000	0.000
G3	1	0.075	4.211	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.045	0.015	0.331	0.000	0.000	0.211	0.000	0.000	0.000	0.000	0.000
G3	2	0.000	0.876	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.132	0.000	0.000	0.048	0.000	0.012	0.012	0.000	0.000
G3	3	0.000	2.289	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.308	0.000	0.000	0.015	0.000	0.015	0.015	0.000	0.000
G3	4	0.014	1.728	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.041	0.000	0.000	0.014	0.000	0.014	0.000	0.000	0.000
G4	1	0.000	2.199	0.824	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069	0.027	0.014	0.000	0.000	0.041	0.000	0.000	0.041	0.000	0.000
G4	2	0.029	1.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.087	0.014	0.404	0.000	0.000	0.029	0.000	0.014	0.000	0.000	0.000
G4	3	0.040	3.525	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.228	0.013	0.013	0.000	0.000	0.188	0.000	0.000	0.080	0.000	0.000
G4	4	0.028	3.952	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.000	0.381	0.000	0.000	0.494	0.000	0.000	0.042	0.000	0.014
G4	5	0.059	2.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.352	0.000	0.411	0.000	0.000	0.117	0.000	0.000	0.000	0.000	0.000
G5	1	0.048	1.155	0.012	0.000	0.036	0.000	0.000	0.000	0.000	0.000	0.096	0.000	0.036	0.000	0.000	0.000	0.000	0.012	0.012	0.000	0.000
G5	2	0.028	2.478	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.127	0.000	0.028	0.000	0.000	0.183	0.000	0.014	0.084	0.000	0.000
G5	3	0.000	1.630	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.112	0.014	0.267	0.000	0.014	0.056	0.000	0.000	0.070	0.000	0.000
G5	4	0.000	0.533	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.031	0.000	0.000	0.016	0.000	0.000
G6	1	0.000	1.573	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.082	0.000	0.014	0.000	0.000	0.055	0.000	0.000	0.055	0.000	0.000
G6	2	0.000	0.927	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084	0.000	0.028	0.000	0.000	0.028	0.000	0.000	0.014	0.000	0.000
G6	3	0.043	3.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.000	0.000	0.029	0.000	0.000	0.029	0.000	0.000
G6	4	0.027	0.785	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000
G7	1	0.000	0.784	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G7	2	0.000	0.794	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000
G7	3	0.000	2.650	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.223	0.000	0.014	0.000	0.000	0.070	0.000	0.000	0.056	0.000	0.000
G7	4	0.028	2.267	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.264	0.000	0.223	0.000	0.000	0.083	0.000	0.000	0.028	0.000	0.000
G7	5	0.000	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G8	1	0.000	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.000	0.056	0.000	0.000	0.069	0.000	0.000	0.028	0.000	0.000
G8	2	0.028	1.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.028	0.000	0.000	0.028	0.000	0.000
G8	3	0.014	1.736	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.181	0.000	0.000	0.097	0.000	0.000	0.069	0.000	0.000
G8	4	0.000	2.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.097	0.000	0.361	0.014	0.000	0.014	0.000	0.000	0.042	0.000	0.000
G8	5	0.039	4.343	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.474	0.000	0.039	0.000	0.000	0.079	0.000	0.000	0.158	0.000	0.000
G9	1	0.095	2.336	0.082	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.000	0.448	0.000	0.000	0.285	0.000	0.000	0.000	0.000	0.000
G9	2	0.000	1.953	0.045	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.477	0.015	0.194	0.000	0.000	0.194	0.000	0.000	0.030	0.000	0.000
G9	3	0.000	1.433	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G9	4	0.026	2.230	0.128	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.359	0.000	0.167	0.000	0.000	0.154	0.000	0.000	0.000	0.000	0.000
G10	1	0.060	2.699	0.075	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.330	0.000	0.255	0.000	0.000	0.105	0.000	0.000	0.045	0.000	0.000
G10	2	0.039	0.944	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.052	0.000	0.013	0.000	0.000	0.039	0.000	0.000	0.026	0.000	0.000
G10	3	0.014	1.951	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.293	0.014	0.237	0.000	0.000	0.042	0.000	0.028	0.084	0.000	0.014
G10	4	0.000	2.659	0.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.182	0.000	0.000	0.098	0.000	0.000	0.042	0.000	0.000
G10	5	0.000	3.314	0.038	0.000	0.038	0.000	0.000	0.000	0.000	0.000	0.267	0.000	0.038	0.000	0.000	0.038	0.000	0.000	0.000	0.000	0.000
G11	1	0.028	1.093	1.383	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.097	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000
G11	2	0.014	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.057	0.000	0.042	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.000
G11	3	0.027	1.030	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000
G11	4	0.025	2.367	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.112	0.025	0.075	0.000	0.000	0.100	0.012	0.000	0.062	0.000	0.000
G12	1	0.014	2.783	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.071	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G12	2	0.013	0.523	0.013	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.040	0.000	0.000
G12	3	0.027	2.536	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.094	0.000	0.054	0.000	0.000	0.094	0.000	0.000	0.013	0.000	0.000
G12	4	0.073	3.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.601	0.018	0.164	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000
G12	5	0.000	3.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G13	1	0.014	1.784	1.394	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.000	0.042	0.000	0.000	0.042	0.000	0.000	0.014	0.000	0.000
G13	2	0.041	0.892	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.054	0.000	0.054	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000

wood.

08-May-20	G13	3	19:27:48	19:30:30	773033.52	5270278.08	773081.58	5270274.04	0	10	0	90	0	0	48.2	69.5	0.000	0.849	0.058	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.043	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.029	0.000	0.000
08-May-20	G13	4	19:30:30	19:32:17	773081.58	5270274.04	773137.11	5270275.85	0	15	0	85	0	0	56.6	80.0	0.025	1.425	0.025	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.112	0.000	0.112	0.000	0.000	0.025		0.000	0.000	0.000	0.000	0.000
08-May-20	G14	1	18:57:03	19:01:08	773150.15	5270277.23	773097.91	5270274.07	0	10	0	90	0	0	52.3	75.3	0.040	2.564	0.000	0.000	0.013		0.000	0.000	0.000	0.000	0.000		0.345	0.000	0.120	0.000	0.000	0.000		0.013	0.000	0.040	0.000	0.000
08-May-20	G14	2	19:01:08	19:03:10	773097.91	5270274.07	773050.84	5270271.80	0	15	0	85	0	0	47.1	67.9	0.000	1.842	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.029	0.000	0.000	0.000		0.000	0.000	0.015	0.000	0.000
08-May-20	G14	3	19:03:10	19:07:31	773050.84	5270271.80	773008.40	5270274.44	0	10	0	90	0	0	42.5	61.2	0.016	1.111	0.033	0.000	0.000		0.000	0.000	0.000	0.000	0.016		0.000	0.000	0.033	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G14	4	19:07:31	19:10:22	773008.40	5270274.44	772952.19	5270273.12	0	15	0	85	0	0	56.2	81.0	0.074	2.470	0.025	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.173	0.000	0.099	0.000	0.000	0.136		0.000	0.000	0.000	0.000	0.000
08-May-20	G14	5	19:10:22	19:14:26	772952.19	5270273.12	772934.25	5270271.02	0	5	0	95	0	0	18.1	26.0	0.038	2.076	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.038	0.000	0.000	0.000		0.000	0.000	0.098	0.000	0.000
08-May-20	G15	1	18:27:31	18:30:19	772940.00	5270265.00	772988.87	5270265.51	0	10	0	90	0	0	48.9	70.4	0.043	2.685	1.421	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.242	0.000	0.057	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000
08-May-20	G15	2	18:30:19	18:32:39	772988.87	5270265.51	773038.12	5270265.26	0	0	0	100	0	0	49.2	70.9	0.000	0.226	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.014	0.014	0.000	0.000	0.000		0.000	0.014	0.000	0.000	0.000
08-May-20	G15	3	18:32:39	18:35:08	773038.12	5270265.26	773090.23	5270265.89	0	0	0	100	0	0	52.1	75.1	0.013	0.107	0.053	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G15	4	18:35:08	18:37:01	773090.23	5270265.89	773138.57	5270266.37	0	20	0	80	0	0	48.3	69.6	0.043	2.888	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.215	0.000	0.158	0.000	0.000	0.244		0.000	0.000	0.187	0.000	0.000
08-May-20	G15	5	18:37:01	18:41:43	773138.57	5270266.37	773150.00	5270268.00	0	15	0	85	0	0	11.5	16.6	0.180	6.436	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.662	0.060	1.022	0.000	0.000	0.782		0.000	0.000	0.421	0.000	0.000
08-May-20	G16	1	17:57:44	18:01:43	773147.00	5270263.00	773098.64	5270261.71	0	15	0	85	0	0	48.4	69.7	0.043	1.981	0.287	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.301	0.100	0.043	0.000	0.000	0.129		0.000	0.000	0.201	0.000	0.000
08-May-20	G16	2	18:01:43	18:04:10	773098.64	5270261.71	773046.39	5270263.03	0	5	0	95	0	0	52.3	75.3	0.000	0.306	0.053	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000
08-May-20	G16	3	18:04:10	18:08:52	773046.39	5270263.03	772999.15	5270261.42	0	5	0	95	0	0	47.3	68.1	0.000	0.705	0.118	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.088	0.000	0.059	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G16	4	18:08:52	18:11:28	772999.15	5270261.42	772945.63	5270261.40	0	10	0	90	0	0	53.5	77.1	0.052	2.305	0.000	0.000	0.000		0.013	0.000	0.000	0.000	0.000		0.026	0.013	0.156	0.000	0.000	0.000		0.000	0.000	0.026	0.000	0.000
08-May-20	G16	5	18:11:28	18:13:44	772945.63	5270261.40	772934.00	5270262.00	0	0	0	100	0	0	11.6	16.8	0.000	0.417	0.596	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G17	1	17:39:50	17:43:07	772940.00	5270253.00	772992.16	5270254.26	0	15	0	85	0	0	52.2	75.1	0.013	1.145	1.331	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.013	0.000	0.053	0.000	0.000	0.027		0.000	0.000	0.000	0.000	0.000
08-May-20	G17	2	17:43:07	17:45:02	772992.16	5270254.26	773039.21	5270255.04	0	5	0	95	0	0	47.1	67.8	0.000	0.546	0.030	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.015	0.000	0.015	0.000	0.000
08-May-20	G17	3	17:45:02	17:46:53	773039.21	5270255.04	773089.22	5270255.02	0	0	0	100	0	0	50.0	72.0	0.000	0.028	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.042	0.000	0.000
08-May-20	G17	4	17:46:53	17:49:48	773089.22	5270255.02	773139.79	5270255.38	0	10	0	90	0	0	50.6	72.8	0.027	1.414	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.055	0.000	0.000	0.082		0.014	0.000	0.110	0.000	0.000
08-May-20	G18	1	17:07:52	17:16:22	773140.17	5270250.70	773091.03	5270249.94	0	5	0	95	0	0	49.1	70.8	0.014	1.145	0.212	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.113	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.028	0.000	0.000
08-May-20	G18	2	17:16:22	17:23:14	773091.03	5270249.94	773040.50	5270249.16	0	0	0	100	0	0	50.5	72.8	0.000	0.014	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.041	0.000	0.000
08-May-20	G18	3	17:23:14	17:27:06	773040.50	5270249.16	772991.62	5270249.13	0	5	0	95	0	0	48.9	70.4	0.000	0.923	0.057	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
08-May-20	G18	4	17:27:06	17:29:51	772991.62	5270249.13	772938.78	5270248.51	0	10	0	90	0	0	52.8	76.1	0.039	1.906	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.129	0.000	0.039	0.000	0.000	0.039		0.013	0.000	0.026	0.000	0.000
08-May-20	G19	1	16:41:51	16:45:53	772937.64	5270243.43	772988.16	5270242.07	0	10	0	90	0	0	50.5	72.8	0.069	1.635	1.388	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.130	0.014	0.027	0.000	0.000	0.124		0.000	0.000	0.014	0.000	0.000
08-May-20	G19	2	16:45:53	16:48:40	772988.16	5270242.07	773037.74	5270242.87	0	5	0	95	0	0	49.6	71.4	0.014	0.224	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.028	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G19	3	16:48:40	16:51:26	773037.74	5270242.87	773087.91	5270242.73	0	0	0	100	0	0	50.2	72.2	0.014	0.069	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G19	4	16:51:26	16:55:59	773087.91	5270242.73	773136.77	5270242.35	0	10	0	90	0	0	48.9	70.4	0.000	0.967	0.142	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G20	1	16:12:59	16:17:53	773143.24	5270238.82	773092.79	5270238.90	0	5	0	95	0	0	50.5	72.6	0.000	0.661	0.083	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
08-May-20	G20	2	16:17:53	16:20:41	773092.79	5270238.90	773043.43	5270238.61	0	0	0	100	0	0	49.4	71.1	0.000	0.000	0.056	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
08-May-20	G20	3	16:20:41	16:28:33	773043.43	5270238.61	772992.86	5270238.04	0	5	0	95	0	0	50.6	72.8	0.027	0.645	0.137	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.014	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
08-May-20	G20	4	16:28:33	16:31:00	772992.86	5270238.04	772943.42	5270237.82	0	10	0	90	0	0	49.4	71.2	0.070	1.615	0.056	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.084	0.000	0.000	0.028		0.014	0.000	0.000	0.000	0.000
08-May-20	G21	1	15:45:32	15:50:36	772939.55	5270230.71	772990.66	5270230.27	0	10	0	90	0	0	51.1	73.6	0.054	1.929	0.598	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.204	0.000	0.177	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
08-May-20	G21	2	15:50:36	15:53:24	772990.66	5270230.27	773038.84	5270230.40	0	5	0	95	0	0	48.2	69.4	0.014	0.663	0.058	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.029	0.000	0.000
08-May-20	G21	3	15:53:24	16:00:27	773038.84	5270230.40	773090.86	5270229.70	0	5	0	95	0	0	52.0	74.9	0.013	0.093	1.135	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G21	4	16:00:27	16:05:59	773090.86	5270229.70	773138.74	5270230.55	0	0	0	100	0	0	47.9	69.0	0.000	0.421	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.015	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G22	1	15:20:45	15:24:56	773138.00	5270221.00	773094.47	5270225.67	0	5	0	95	0	0	43.8	63.0	0.032	0.603	0.270	0.000	0.016		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.032	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G22	2	15:24:56	15:28:03	773094.47	5270225.67	773044.47	5270225.68	0	5	0	95	0	0	50.0	72.0	0.014	0.194	0.125	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000
08-May-20	G22	3	15:28:03	15:36:28	773044.47	5270225.68	772994.81	5270226.36	0	0	0	100	0	0	49.7	71.5	0.028	1.347	0.727	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.056	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000
08-May-20	G22	4	15:36:28	15:40:32	772994.81	5270226.36	772933.68	5270227.21	0	15	0	85	0	0	61.1	88.0	0.068	2.624	0.034	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.023	0.000	0.273	0.000	0.000	0.045		0.000	0.000	0.136	0.000	0.000
08-May-20	G23	1	14:40:43	14:45:53	772941.00	5270220.00	772991.40	5270218.69	0	10	0	90	0	0	50.4	72.6	0.138	1.956	0.331	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.055	0.000	0.303	0.000	0.000	0.110		0.000	0.000	0.041	0.000	0.000
08-May-20	G23	2	14:45:53	14:48:38	772991.40	5270218.69	773040.12	5270218.27	0	10	0	90	0	0	48.7	70.2	0.086	1.283	0.086	0.000	0.043		0.000	0.000	0.000	0.000	0.000		0.157	0.000	0.000	0.000	0.000	0.014		0.014	0.000	0.014	0.000	0.000
08-May-20	G23	3	14:48:38	14:51:20	773040.12	5270218.27	773090.44	5270217.51	0	0	0	100	0	0	50.3	72.5	0.000	0.745	0.152	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G23	5	14:51:20	14:56:27	773090.44	5270217.51	773136.93	5270217.11	0	0	0	100	0	0	46.5	67.0	0.015	0.224	0.015	0.000	0.045		0.000	0.000	0.000	0.000	0.000		0.015	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G24	1	14:17:47	14:18:56	773139.00	5270213.00	773089.29	5270214.56	0	10	0	90	0	0	49.7	71.6	0.014	0.656	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.070	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.028
08-May-20	G24	2	14:18:56	14:22:01	773089.29	5270214.56	773040.83	5270214.84	0	10	0	90	0	0	48.5	69.8	0.014	1.003	0.014	0.000	0.072		0.000	0.000	0.000	0.000	0.000		0.086	0.000	0.014	0.000	0.000	0.043		0.043	0.000	0.029	0.000	0.000
08-May-20	G24	3	14:22:01	14:29:28	773040.83	5270214.84	772990.35	5270215.20	0	10	0	90	0	0	50.5	72.7	0.041	1.651	0.055	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.083	0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.028	0.000	0.000
08-May-20	G24	4	14:29:28	14:34:22	772990.35	5270215.20	772937.08	5270214.01	0	15	0	85	0	0	53.3	76.7	0.104	3.024	0.521	0.000	0.013		0.000	0.000	0.000	0.000	0.000		0.352	0.000	0.117	0.000	0.000	0.000		0.013	0.000	0.052	0.000	0.000
08-May-20	G25	1	13:49:52	13:56:53	772939.00	5270207.00	772988.57	5270206.85	0	15	0	85	0	0	49.6	71.4	0.042	2.942	0.728	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.252	0.000	0.070	0.000	0.000	0.070		0.000	0.000	0.000	0.000	0.000
08-May-20	G25	2	13:56:53	13:58:59	772988.57	5270206.85	773039.41	5270206.33	0	10	0	90	0	0	50.8	73.2	0.082	1.503	0.055	0.000	0.068		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G25	3	13:58:59	14:01:23	773039.41	5270206.33	773093.52	5270206.07	0	10	0	90	0	0	54.1	77.9	0.038	1.283	0.013	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.013	0.000	0.000	0.000	0.000	0.000		0.013	0.000	0.000	0.000	0.013
08-May-20	G25	4	14:01:23	14:04:42	773093.52	5270206.07	773139.19	5270207.16	0	5	0	95	0	0	45.7	65.8	0.000	0.775	0.015	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.046	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.015
08-May-20	G26	1	13:25:59	13:31:54	773139.00	5270202.00	773091.28	5270199.14	0	5	0	95	0	0	47.8	68.8	0.044	0.857	0.029	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.015	0.000	0.000
08-May-20	G26	2	13:31:54	13:35:37	773091.28	5270199.14	773039.42	5270200.80	0	10	0	90	0	0	51.9	74.7	0.040	1.298	0.000	0.000	0.054		0.000	0.000	0.000	0.000	0.000		0.107	0.000	0.013	0.000	0.000	0.000		0.000	0.000	0.027	0.000	0.013
08-May-20	G26	3	13:35:37	13:38:58	773039.42	5270200.80	772990.04	5270201.26	0	0	0	100	0	0	49.4	71.1	0.070	1.097	0.014	0.000	0.042		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.014
08-May-20	G26	4	13:38:58	13:44:29	772990.04	5270201.26	772938.00	5270200.00	0	15	0	85	0	0	52.1	75.0	0.067	2.241	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.240	0.000	0.160	0.000	0.000	0.000		0.013	0.000	0.013	0.000	0.000
08-May-20	G27	1	13:03:14	13:07:21	772937.84	5270193.97	772987.94	5270194.16	0	15	0	85	0	0	50.1	72.1	0.097	2.575	0.069	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.624	0.000	0.014	0.000	0.000	0.111		0.000	0.000	0.000	0.000	0.000
08-May-20	G27	2	13:07:21	13:10:42	772987.94	5270194.16	773037.90	5270194.37	0	5	0	95	0	0	50.0	72.0	0.069	1.251	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.028	0.000	0.014

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08-May-20	G27	3	13:10:42	13:14:22	773037.90	5270194.37	773086.70	5270195.06	0	10	0	90	0	0	48.8	70.3	0.057	2.846	0.014	0.000	0.114		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.014	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.014
08-May-20	G27	4	13:14:22	13:20:27	773086.70	5270195.06	773139.52	5270194.35	0	5	0	95	0	0	52.6	76.1	0.013	1.578	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.063	0.000	0.039	0.000	0.000	0.026		0.013	0.000	0.013	0.000	0.013
08-May-20	G28	1	12:14:45	12:20:46	773140.00	5270190.00	773090.28	5270189.79	0	10	0	90	0	0	49.7	71.6	0.056	1.369	0.112	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.056	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.014
08-May-20	G28	2	12:20:46	12:24:13	773090.28	5270189.79	773040.08	5270188.84	0	5	0	95	0	0	50.2	72.3	0.041	1.217	0.028	0.000	0.083		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G28	3	12:24:13	12:46:52	773040.08	5270188.84	772990.42	5270189.82	0	10	5	85	0	0	49.7	71.5	0.056	1.887	0.098	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.028	0.000	0.000	0.112		0.000	0.000	0.000	0.000	0.014
08-May-20	G28	4	12:46:52	12:50:00	772990.42	5270189.82	772936.52	5270188.34	0	10	0	90	0	0	54.1	77.9	0.064	1.540	0.026	0.000	0.013		0.000	0.000	0.000	0.000	0.000		0.334	0.000	0.141	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G29	1	11:47:25	11:54:12	772938.53	5270182.41	772988.83	5270182.56	0	15	0	85	0	0	50.3	72.4	0.041	2.623	0.552	0.000	0.041		0.000	0.000	0.000	0.000	0.000		0.345	0.000	0.097	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
08-May-20	G29	2	11:54:12	11:57:37	772988.83	5270182.56	773038.26	5270182.30	0	10	0	90	0	0	49.4	71.2	0.126	1.770	0.084	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.112	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.014
08-May-20	G29	3	11:57:37	12:02:53	773038.26	5270182.30	773087.73	5270182.10	0	5	0	95	0	0	49.5	71.2	0.014	0.772	0.014	0.000	0.126		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
08-May-20	G29	4	12:02:53	12:07:13	773087.73	5270182.10	773138.00	5270181.00	0	5	0	95	0	0	50.3	72.4	0.028	1.436	0.014	0.000	0.041		0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G30	1	11:13:31	11:18:36	773141.00	5270177.00	773092.01	5270178.19	0	5	0	95	0	0	49.0	70.6	0.028	0.935	0.014	0.000	0.071		0.000	0.000	0.000	0.000	0.000		0.043	0.000	0.028	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000
08-May-20	G30	2	11:18:36	11:22:47	773092.01	5270178.19	773041.26	5270177.65	0	5	0	95	0	0	50.8	73.1	0.014	1.136	0.014	0.000	0.137		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.000
08-May-20	G30	3	11:22:47	11:30:28	773041.26	5270177.65	772991.43	5270177.42	0	5	0	95	0	0	49.8	71.7	0.070	1.394	0.014	0.000	0.084		0.000	0.000	0.000	0.000	0.000		0.056	0.000	0.014	0.000	0.000	0.042		0.000	0.000	0.014	0.000	0.000
08-May-20	G30	4	11:30:28	11:34:14	772991.43	5270177.42	772939.49	5270177.98	0	10	0	90	0	0	51.9	74.8	0.094	2.206	0.067	0.000	0.067		0.000	0.000	0.000	0.000	0.000		0.174	0.000	0.013	0.000	0.000	0.000		0.000	0.000	0.013	0.000	0.000
08-May-20	G31	1	10:47:05	10:50:45	772940.20	5270171.41	772989.18	5270169.44	0	10	0	90	0	0	49.0	70.8	0.071	2.536	0.567	0.000	0.028		0.000	0.000	0.000	0.000	0.000		0.269	0.000	0.241	0.000	0.000	0.085		0.000	0.000	0.000	0.000	0.014
08-May-20	G31	2	10:50:45	10:53:17	772989.18	5270169.44	773039.67	5270169.88	0	10	5	85	0	0	50.3	72.4	0.110	2.389	0.014	0.000	0.041		0.000	0.000	0.000	0.000	0.000		0.110	0.000	0.014	0.000	0.000	0.055		0.000	0.000	0.014	0.000	0.000
08-May-20	G31	3	10:53:17	10:56:22	773039.67	5270169.88	773090.03	5270170.50	0	5	0	95	0	0	50.6	72.8	0.041	1.470	0.000	0.000	0.069		0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.014
08-May-20	G31	4	10:56:22	11:01:01	773090.03	5270170.50	773140.20	5270170.71	0	5	0	95	0	0	50.2	72.2	0.014	1.218	0.111	0.000	0.028		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
08-May-20	G32	1	10:13:32	10:20:31	773145.00	5270165.00	773094.53	5270165.75	0	10	0	90	0	0	50.5	72.7	0.028	1.720	0.151	0.000	0.005		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000
08-May-20	G32	2	10:20:31	10:30:59	773094.53	5270165.75	773045.23	5270166.18	0	10	0	90	0	0	49.3	71.0	0.042	1.690	0.028	0.000	0.141		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.028	0.000	0.000	0.028		0.000	0.000	0.014	0.000	0.000
08-May-20	G32	3	10:30:59	10:34:44	773045.23	5270166.18	772994.23	5270165.66	0	10	0	90	0	0	51.0	73.4	0.123	2.111	0.000	0.000	0.027		0.000	0.000	0.000	0.000	0.000		0.150	0.000	0.054	0.000	0.000	0.041		0.000	0.000	0.014	0.000	0.000
08-May-20	G32	4	10:34:44	10:37:20	772994.23	5270165.66	772945.28	5270166.04	0	15	0	85	0	0	49.0	70.5	0.085	1.220	0.000	0.000	0.085		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.184	0.000	0.000	0.014		0.000	0.000	0.028	0.000	0.000
08-May-20	G33	1	9:44:00	9:47:41	772937.00	5270157.00	772986.64	5270158.30	0	10	0	90	0	0	49.5	71.2	0.042	1.909	2.822	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.225	0.000	0.168	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
08-May-20	G33	2	9:47:41	9:50:58	772986.64	5270158.30	773038.68	5270158.46	0	10	0	90	0	0	52.2	75.2	0.066	1.954	0.027	0.000	0.146		0.000	0.000	0.000	0.000	0.000		0.040	0.000	0.013	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G33	3	9:50:58	9:54:40	773038.68	5270158.46	773088.40	5270158.15	0	10	0	90	0	0	49.7	71.6	0.070	2.570	0.070	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.098	0.000	0.014	0.000	0.000	0.058		0.000	0.014	0.014	0.000	0.000
08-May-20	G33	4	9:54:40	9:59:39	773088.40	5270158.15	773137.24	5270158.20	0	10	0	90	0	0	48.8	70.3	0.057	1.834	0.100	0.000	0.085		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G34	1	9:19:37	9:24:58	773140.00	5270153.00	773090.11	5270153.03	0	10	0	90	0	0	49.9	71.8	0.084	2.032	0.223	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.056	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
08-May-20	G34	2	9:24:58	9:28:52	773090.11	5270153.03	773039.92	5270153.85	0	5	0	95	0	0	50.2	72.3	0.194	2.560	0.111	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.055	0.000	0.000	0.042		0.000	0.000	0.000	0.000	0.000
08-May-20	G34	3	9:28:52	9:32:31	773039.92	5270153.85	772989.21	5270152.73	0	5	0	95	0	0	50.7	73.0	0.055	1.643	0.014	0.000	0.068		0.000	0.000	0.000	0.000	0.000		0.082	0.000	0.041	0.000	0.000	0.014		0.014	0.000	0.027	0.000	0.014
08-May-20	G34	4	9:32:31	9:37:30	772989.21	5270152.73	772939.52	5270153.54	0	15	0	85	0	0	49.7	71.6	0.098	2.795	0.126	0.000	0.028		0.000	0.000	0.000	0.000	0.000		0.042	0.000	0.238	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
08-May-20	G35	1	8:53:21	8:57:02	772940.00	5270146.00	772991.13	5270146.45	0	15	0	85	0	0	51.1	73.6	0.353	3.586	2.037	0.000	0.041		0.000	0.000	0.000	0.000	0.000		0.964	0.000	0.217	0.000	0.000	0.068		0.000	0.000	0.014	0.000	0.000
08-May-20	G35	2	8:57:02	8:59:43	772991.13	5270146.45	773040.12	5270146.48	0	10	5	85	0	0	49.0	70.5	0.113	3.260	0.000	0.000	0.213		0.000	0.000	0.000	0.000	0.000		0.071	0.000	0.014	0.000	0.000	0.028		0.000	0.000	0.014	0.000	0.000
08-May-20	G35	3	8:59:43	9:05:49	773040.12	5270146.48	773089.40	5270144.46	0	10	0	90	0	0	49.3	71.0	0.127	2.225	0.016	0.000	0.113		0.016	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
08-May-20	G35	4	9:05:49	9:11:00	773089.40	5270144.46	773138.19	5270147.33	0	10	0	90	0	0	48.9	70.4	0.114	1.805	0.014	0.000	0.171		0.000	0.000	0.000	0.000	0.000		0.071	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
08-May-20	G36	1	8:18:50	8:25:42	773137.00	5270141.00	773088.37	5270141.32	0	10	0	90	0	0	48.6	70.0	0.100	1.713	0.286	0.000	0.228		0.000	0.000	0.000	0.000	0.000		0.029	0.000	0.000	0.000	0.000	0.029		0.000	0.000	0.000	0.000	0.000
08-May-20	G36	2	8:25:42	8:28:40	773088.37	5270141.32	773038.55	5270141.08	0	5	0	95	0	0	49.8	71.7	0.209	1.436	0.000	0.000	0.195		0.000	0.000	0.000	0.000	0.000		0.070	0.000	0.014	0.000	0.000	0.000		0.000	0.014	0.000	0.000	0.000
08-May-20	G36	3	8:28:40	8:31:50	773038.55	5270141.08	772987.34	5270142.06	0	10	0	90	0	0	51.2	73.7	0.136	2.319	0.041	0.000	0.217		0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.014	0.000	0.000	0.054		0.000	0.000	0.000	0.000	0.000
08-May-20	G36	4	8:31:50	8:37:07	772987.34	5270142.06	772938.89	5270140.23	0	10	0	90	0	0	48.5	69.8	0.215	2.134	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.358	0.000	0.086	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
02-May-20	T1	1	19:57:53	20:00:10	773005.34	5270146.83	772995.36	5270099.50	0	5	0	95	0	0	48.4	69.7	0.158	2.369	3.357	0.000	0.144		0.000	0.000	0.000	0.000	0.000		0.632	0.000	0.244	0.000	0.000	0.000		0.000	0.043	0.014	0.000	0.000
02-May-20	T1	2	20:00:10	20:05:43	772995.36	5270099.50	772984.24	5270049.97	0	5	0	95	0	0	50.8	73.1	0.055	1.505	0.041	0.000	0.260		0.000	0.000	0.000	0.000	0.000		0.101	0.000	0.109	0.000	0.000	0.109		0.041	0.027	0.027	0.000	0.000
02-May-20	T1	3	20:05:43	20:18:29	772984.24	5270049.97	772970.68	5270002.33	0	10	0	90	0	0	49.5	71.3	0.112	1.304	1.430	0.000	0.224		0.000	0.000	0.000	0.000	0.000		0.098	0.000	0.196	0.000	0.000	0.047		0.000	0.014	0.000	0.000	0.000
02-May-20	T1	4	20:18:29	20:38:10	772970.68	5270002.33	772952.21	5269954.74	0	15	0	85	0	0	51.1	73.5	0.150	1.455	1.456	0.000	0.027		0.000	0.000	0.000	0.000	0.000		0.558	0.000	0.517	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
02-May-20	T1	5	20:38:10	20:46:27	772952.21	5269954.74	772939.65	5269906.51	0	10	0	90	0	0	48.8	71.8	0.167	1.853	1.394	0.000	0.613		0.000	0.000	0.000	0.000	0.000		0.571	0.000	0.237	0.000	0.000	0.056		0.000	0.000	0.042	0.000	0.000
02-May-20	T1	6	20:46:27	20:55:18	772939.65	5269906.51	772925.19	5269857.83	0	5	0	95	0	0	50.8	73.1	0.178	1.518	0.068	0.000	0.027		0.000	0.000	0.000	0.000	0.000		0.656	0.000	0.014	0.000	0.000	0.041		0.000	0.000	0.014	0.000	0.000
02-May-20	T1	7	20:55:18	21:00:19	772925.19	5269857.83	772912.88	5269810.72	0	10	0	90	0	0	48.7	70.1	0.128	1.426	0.257	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.029	0.000	0.157	0.000	0.000	0.057		0.000	0.000	0.000	0.000	0.000
02-May-20	T1	8	21:00:19	21:04:20	772912.88	5269810.72	772896.42	5269763.15	0	5	0	95	0	0	50.3	72.5	0.014	0.579	0.028	0.000	0.028		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.028	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
02-May-20	T1	9	21:04:20	21:14:21	772896.42	5269763.15	772880.80	5269713.85	0	5	0	95	0	0	51.7	74.5	0.013	0.806	1.397	0.000	0.040		0.013	0.000	0.000	0.000	0.000		0.081	0.000	0.040	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
02-May-20	T1	10	21:14:21	21:20:06	772880.80	5269713.85	772867.09	5269667.02	0	5	0	95	0	0	48.8	70.3	0.085	0.968	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.057	0.000	0.014	0.000	0.000	0.014		0.014	0.000	0.000	0.000	0.000
02-May-20	T1	11	21:20:06	21:23:42	772867.09	5269667.02	772852.91	5269619.48	0	5	0	95	0	0	49.6	71.4	0.014	0.644	0.056	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
02-May-20	T1	12	21:23:42	21:25:49	772852.91	5269619.48	772839.49	5269572.01	0	5	0	95	0	0	49.3	71.0	0.014	0.591	0.042	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
02-May-20	T1	13	21:25:49	21:39:59	772839.49	5269572.01	772828.70	5269523.36	0	0	0	100	0	0	49.8	71.8	0.028	0.488	0.070	0.000	0.014		0.070	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.014
02-May-20	T1	14	21:39:59	21:42:19	772828.70	5269523.36	772816.66	5269473.84	0	5	5	90	0	0	51.0	73.4	0.027	0.709	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.014
02-May-20	T1	15	21:42:19	21:44:17	772816.66	5269473.84	772808.02	5269426.27	0	0	0	100	0	0	49.5	71.3	0.014	0.702	0.014	0.000	0.000		0.028	0.000	0.000	0.000	0.000		0.112	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
02-May-20	T1	16	21:44:17	21:47:51	772808.02	5269426.27	772787.66	5269377.80	0	5	0	95	0	0	50.8	73.2	0.014	0.806	0.041	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.000	0.014		0.014	0.055	0.000	0.000	0.000
02-May-20	T1	17	21:47:51	21:49:40	772787.66	5269377.80	772774.91	5269330.66	0	0	0	100	0	0	48.8	70.3	0.043	0.356	0.028	0.000	0.014		0.014	0.000	0.000	0.000	0.000		0.014	0.000	0.057	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
02-May-20	T1	18	21:49:40	22:00:24	772774.91	5269330.66	772758.11	5269282.48	0	5	0	95	0	0	51.0	73.5	0.000	0.776	1.361	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.082	0.000	0.014	0.000	0.000	0.000		0.027	0.027	0.000	0.000	0.000
02-May-20	T1	19	22:00:24	22:05:01	772758.11	5269282.48	772746.57	5269233.53	0	10	0	90	0	0	50.3	72.4	0.028	0.842	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.055	0.000	0.000	0.028		0.014	0.000	0.000	0.000	0.000

02-May-20	T1	20	22:05:01	22:10:21	772746.57	5269233.53	772732.71	5269185.02	0	10	0	90	0	0	50.5	72.7	0.083	1.046	0.179	0.000	0.028		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.206	0.000	0.000	0.261		0.000	0.041	0.014	0.000	0.000
02-May-20	T1	21	22:10:21	22:15:47	772732.71	5269185.02	772718.43	5269137.11	0	10	0	90	0	0	50.0	72.0	0.139	1.250	0.028	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.042	0.000	0.000	0.028		0.014	0.000	0.000	0.000	0.000
03-May-20	T-200	1	7:10:40	7:12:51	772623.00	5270159.00	772670.00	5270145.00	0	5	0	95	0	0	49.0	70.6	0.057	1.898	1.416	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.099	0.000	0.085	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000
03-May-20	T-200	2	7:12:51	7:15:15	772670.00	5270145.00	772716.00	5270134.00	0	10	10	80	0	0	47.3	68.1	0.514	3.832	1.468	0.000	0.029		0.000	0.000	0.000	0.000	0.000		0.015	0.015	0.029	0.000	0.000	0.132		0.073	0.000	0.015	0.000	0.015
03-May-20	T-200	3	7:15:15	7:17:30	772716.00	5270134.00	772766.00	5270119.00	0	0	15	85	0	0	52.2	75.2	0.053	2.049	0.067	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.040	0.027	0.040	0.000	0.000	0.040		0.013	0.000	0.013	0.000	0.013
03-May-20	T-200	4	7:17:30	7:19:54	772766.00	5270119.00	772813.00	5270101.00	0	15	0	85	0	0	50.3	72.5	1.090	6.913	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.083	0.000	0.262	0.000	0.000	0.110		0.028	0.000	0.014	0.000	0.000
03-May-20	T-200	5	7:19:54	7:21:54	772813.00	5270101.00	772855.00	5270090.00	0	0	0	100	0	0	47.3	68.1	0.073	3.685	0.059	0.000	0.015		0.000	0.000	0.000	0.000	0.000		0.220	0.000	0.162	0.000	0.000	0.059		0.000	0.000	0.000	0.000	0.000
03-May-20	T-200	6	7:21:54	7:24:08	772859.00	5270090.00	772908.00	5270077.00	0	10	5	85	0	0	50.7	73.0	0.658	4.219	0.014	0.000	0.027		0.000	0.000	0.000	0.000	0.000		0.452	0.000	0.110	0.000	0.000	0.014		0.027	0.000	0.014	0.000	0.000
03-May-20	T-200	7	7:24:08	7:26:32	772908.00	5270077.00	773006.00	5270050.00	0	15	15	70	0	0	101.7	146.4	0.526	2.979	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.403	0.000	0.225	0.007	0.000	0.082		0.014	0.000	0.014	0.000	0.000
03-May-20	T-200	8	7:26:32	7:30:11	773006.00	5270050.00	772958.00	5270064.00	0	5	5	90	0	0	50.0	72.0	0.472	3.403	0.069	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.208	0.000	0.097	0.000	0.000	0.042		0.000	0.000	0.014	0.000	0.000
03-May-20	T-200	9	7:30:11	7:32:58	772958.00	5270064.00	773055.00	5270037.00	0	5	0	95	0	0	100.7	145.0	0.172	1.186	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.103	0.000	0.041	0.000	0.000	0.021		0.000	0.000	0.000	0.000	0.000
03-May-20	T-200	10	7:32:58	7:35:09	773055.00	5270037.00	773101.00	5270022.00	0	5	25	70	0	0	40.4	69.7	0.215	1.981	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.187	0.000	0.072	0.000	0.000	0.000		0.029	0.000	0.014	0.000	0.000
03-May-20	T-200	11	7:35:09	7:37:37	773101.00	5270022.00	773150.00	5270011.00	0	0	0	100	0	0	50.2	72.3	0.277	2.323	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.028
03-May-20	T-200	12	7:37:37	7:40:22	773150.00	5270011.00	773197.00	5269993.00	0	0	0	100	0	0	50.3	72.5	0.355	4.264	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.110	0.000	0.110	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
03-May-20	T-200	13	7:40:22	7:45:01	773197.00	5269993.00	773245.00	5269981.00	0	5	0	95	0	0	49.5	71.2	0.225	2.863	1.404	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.407	0.000	0.253	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.014
03-May-20	T-200	14	7:45:01	7:48:25	773245.00	5269981.00	773295.00	5269967.00	0	5	5	90	0	0	51.9	74.8	0.053	3.210	0.056	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.294	0.000	0.160	0.000	0.000	0.027		0.013	0.000	0.013	0.000	0.000
03-May-20	T-200	15	7:48:25	7:51:41	773295.00	5269967.00	773343.00	5269956.00	0	5	5	90	0	0	49.2	70.9	0.324	1.904	0.071	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.113	0.000	0.000	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
03-May-20	T-300	1	6:13:03	6:15:42	773317.00	5269856.00	773274.00	5269877.00	0	0	5	95	0	0	47.9	68.9	0.160	1.799	1.451	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.058	0.000	0.000	0.000		0.015	0.000	0.000	0.000	0.000
03-May-20	T-300	2	6:15:42	6:18:09	773274.00	5269877.00	773225.00	5269887.00	0	5	0	95	0	0	50.0	72.0	0.875	1.875	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
03-May-20	T-300	3	6:18:09	6:20:47	773225.00	5269887.00	773176.00	5269903.00	0	0	0	100	0	0	51.5	74.2	0.094	1.590	0.000	0.000	0.027		0.040	0.000	0.000	0.000	0.000		0.013	0.000	0.013	0.000	0.000	0.000		0.013	0.000	0.000	0.000	0.013
03-May-20	T-300	4	6:20:47	6:23:13	773176.00	5269903.00	773127.00	5269916.00	0	0	0	100	0	0	50.7	73.0	0.110	1.836	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.068	0.000	0.027	0.000	0.000	0.000		0.000	0.000	0.027	0.000	0.000
03-May-20	T-300	5	6:23:13	6:25:38	773127.00	5269916.00	773082.00	5269929.00	0	5	10	85	0	0	46.8	67.4	0.460	3.929	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.371	0.000	0.178	0.015	0.000	0.000		0.044	0.000	0.044	0.000	0.000
03-May-20	T-300	6	6:25:38	6:28:11	773082.00	5269929.00	773030.00	5269944.00	0	10	10	80	0	0	54.1	77.9	0.500	3.580	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.026	0.000	0.218	0.000	0.000	0.013		0.000	0.000	0.000	0.000	0.013
03-May-20	T-300	7	6:28:11	6:30:26	773030.00	5269944.00	772983.00	5269957.00	0	10	10	80	0	0	48.8	70.2	0.598	2.919	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.228	0.000	0.242	0.000	0.000	0.114		0.014	0.000	0.014	0.000	0.000
03-May-20	T-300	8	6:30:26	6:32:57	772983.00	5269957.00	772936.00	5269971.00	0	15	15	70	0	0	49.0	70.6	3.880	3.441	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.269	0.000	0.212	0.000	0.000	0.113		0.000	0.000	0.057	0.000	0.000
03-May-20	T-300	9	6:32:57	6:35:40	772936.00	5269971.00	772888.00	5269984.00	0	5	5	90	0	0	49.7	71.6	0.447	2.444	0.014	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.154	0.000	0.070	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000
03-May-20	T-300	10	6:35:40	6:38:01	772888.00	5269984.00	772839.00	5269996.00	0	5	5	90	0	0	50.4	72.6	0.730	3.813	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.427	0.000	0.193	0.000	0.000	0.014		0.014	0.000	0.000	0.000	0.000
03-May-20	T-300	11	6:38:01	6:40:27	772839.00	5269996.00	772791.00	5270009.00	0	5	0	95	0	0	49.7	71.6	0.000	1.508	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000
03-May-20	T-300	12	6:40:27	6:43:01	772791.00	5270009.00	772743.00	5270023.00	0	5	15	80	0	0	50.0	72.0	0.792	4.542	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.189	0.000	0.069	0.000	0.000	0.125		0.014	0.000	0.000	0.000	0.014
03-May-20	T-300	13	6:43:01	6:45:19	772743.00	5270023.00	772695.00	5270039.00	0	5	5	90	0	0	50.8	72.9	0.673	6.465	0.016	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.151	0.000	0.069	0.000	0.000	0.069		0.000	0.000	0.041	0.000	0.000
03-May-20	T-300	14	6:45:19	6:47:37	772695.00	5270039.00	772647.00	5270053.00	0	5	5	90	0	0	50.0	72.0	0.056	1.500	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.014
03-May-20	T-300	15	6:47:37	6:50:16	772647.00	5270053.00	772599.00	5270065.00	0	5	0	100	0	0	49.5	71.2	0.056	1.207	0.084	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.028	0.000	0.028	0.000	0.028
03-May-20	T-400	1	5:23:30	5:24:10	772595.00	5269957.00	772613.00	5269957.00	0	5	0	95	0	0	18.0	25.9	0.039	0.502	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.077	0.000	0.000	0.154		0.000	0.000	0.039	0.000	0.000
03-May-20	T-400	2	5:24:10	5:30:09	772613.00	5269957.00	772660.00	5269941.00	0	0	0	100	0	0	49.6	71.5	0.028	0.601	0.028	0.000	0.000		0.042	0.000	0.000	0.000	0.000		0.028	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
03-May-20	T-400	3	5:30:09	5:32:02	772660.00	5269941.00	772710.00	5269928.00	0	0	0	100	0	0	51.7	74.4	0.013	1.075	0.040	0.000	0.000		0.027	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000
03-May-20	T-400	4	5:32:02	5:34:02	772710.00	5269928.00	772756.00	5269914.00	0	0	5	95	0	0	48.1	69.2	0.014	2.513	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.043	0.000	0.000	0.000	0.000
03-May-20	T-400	5	5:34:02	5:36:00	772756.00	5269914.00	772806.00	5269898.00	0	5	5	90	0	0	52.5	75.6	0.053	2.765	0.040	0.000	0.013		0.000	0.000	0.000	0.000	0.000		0.053	0.000	0.000	0.000	0.000	0.013		0.026	0.000	0.000	0.000	0.000
03-May-20	T-400	6	5:36:00	5:37:49	772806.00	5269898.00	772853.00	5269887.00	0	5	5	90	0	0	48.3	69.5	0.025	1.352	0.029	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.043	0.000	0.072	0.000	0.000	0.000		0.014	0.014	0.014	0.000	0.000
03-May-20	T-400	7	5:37:49	5:39:39	772851.00	5269887.00	772901.00	5269872.00	0	10	10	80	0	0	50.3	72.4	0.345	4.488	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.442	0.000	0.193	0.014	0.000	0.041		0.028	0.000	0.028	0.000	0.000
03-May-20	T-400	8	5:39:39	5:41:23	772901.00	5269872.00	772949.00	5269859.00	0	0	10	90	0	0	40.7	71.6	0.265	1.829	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.098	0.000	0.209	0.000	0.000	0.028		0.028	0.000	0.000	0.000	0.000
03-May-20	T-400	9	5:41:23	5:43:09	772949.00	5269859.00	772998.00	5269845.00	0	10	10	80	0	0	51.0	73.4	0.232	2.235	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.204	0.000	0.218	0.000	0.000	0.068		0.027	0.000	0.014	0.000	0.014
03-May-20	T-400	10	5:43:09	5:44:55	772998.00	5269845.00	773047.00	5269829.00	0	5	5	85	0	0	51.5	74.2	0.593	4.365	0.040	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.013	0.013	0.202	0.000	0.000	0.108		0.000	0.013	0.027	0.000	0.000
03-May-20	T-400	11	5:44:55	5:46:39	773047.00	5269829.00	773090.00	5269820.00	0	5	5	90	0	0	43.9	63.3	0.237	1.533	0.016	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.095	0.000	0.079	0.000	0.000	0.000		0.016	0.000	0.032	0.000	0.000
03-May-20	T-400	12	5:46:39	5:48:26	773090.00	5269820.00	773140.00	5269801.00	0	5	10	85	0	0	53.5	77.0	1.324	4.466	0.013	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.052	0.026	0.169	0.000	0.000	0.065		0.026	0.000	0.000	0.000	0.000
03-May-20	T-400	13	5:48:26	5:52:44	773140.00	5269801.00	773189.00	5269788.00	0	0	5	95	0	0	50.7	73.0	0.055	2.041	0.000	0.000	0.151		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.096	0.000	0.000	0.014		0.014	0.000	0.000	0.000	0.000
03-May-20	T-400	14	5:52:44	5:54:46	773189.00	5269788.00	773239.00	5269777.00	0	5	5	90	0	0	51.2	73.7	0.027	1.872	0.014	0.000	0.217		0.000	0.000	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000	0.041		0.000	0.000	0.000	0.000	0.000
03-May-20	T-400	15	5:54:46	5:56:54	773239.00	5269777.00	773289.00	5269760.00	0	0	0	0	0	0	52.8	76.0	0.210	3.629	0.013	0.000	0.039		0.000	0.000	0.000	0.000	0.000		0.145	0.000	0.118	0.000	0.000	0.026		0.053	0.000	0.026	0.000	0.000
03-May-20	T-500	1	4:25:37	4:30:36	773262.00	5269666.00	773217.00	5269681.00	0	10	0	90	0	0	47.4	68.3	0.029	1.479	0.146	0.000	0.015		0.000	0.000	0.000	0.000	0.000		0.029	0.000	0.044	0.000	0.000	0.000		0.015	0.000	0.015	0.000	0.000
03-May-20	T-500	2	4:30:36	4:34:08	773217.00	5269681.00	773171.00	5269694.00	0	0	5	95	0	0	47.8	68.8	0.218	1.613	0.044	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.044	0.000	0.029	0.000	0.000	0.000		0.000	0.000	0.058	0.000	0.000

03-May-20	T-500	3	4:34:08	4:35:58	773171.00	5269694.00	773122.00	5269709.00	0	5	5	90	0	0	51.2	73.8	0.122	1.789	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.027	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.014
03-May-20	T-500	4	4:35:58	4:37:49	773122.00	5269709.00	773070.00	5269718.00	0	5	5	90	0	0	52.8	76.0	0.224	2.540	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.237	0.000	0.079	0.000	0.000	0.000		0.013	0.000	0.013	0.000	0.000
03-May-20	T-500	5	4:37:49	4:39:38	773070.00	5269718.00	773023.00	5269737.00	0	10	5	85	0	0	50.7	73.0	0.178	2.099	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.151	0.000	0.123	0.014	0.000	0.068		0.000	0.000	0.000	0.000	0.000
03-May-20	T-500	6	4:39:38	4:41:21	773023.00	5269737.00	772976.00	5269751.00	0	15	0	85	0	0	49.0	70.6	0.071	3.299	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.156	0.014	0.028	0.000	0.000	0.057		0.014	0.000	0.028	0.000	0.000
03-May-20	T-500	7	4:41:21	4:43:13	772976.00	5269751.00	772927.00	5269762.00	0	15	5	85	0	0	50.2	72.3	0.318	3.678	0.014	0.000	0.014		0.000	0.000	0.000	0.000	0.000		0.111	0.000	0.055	0.000	0.000	0.097		0.041	0.000	0.028	0.000	0.000
03-May-20	T-500	8	4:43:13	4:44:51	772927.00	5269762.00	772884.00	5269778.00	0	20	0	85	0	0	45.9	66.1	0.015	4.041	0.061	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.030	0.000	0.015	0.000	0.000	0.061		0.061	0.000	0.030	0.000	0.000
03-May-20	T-500	9	4:44:51	4:46:41	772884.00	5269778.00	772828.00	5269789.00	0	0	5	95	0	0	57.1	82.2	0.037	1.935	0.012	0.000	0.024		0.037	0.000	0.000	0.000	0.000		0.012	0.000	0.024	0.000	0.000	0.000		0.024	0.000	0.000	0.000	0.000
03-May-20	T-500	10	4:46:41	4:48:22	772828.00	5269789.00	772781.00	5269802.00	0	5	10	85	0	0	48.8	70.2	0.057	1.752	0.028	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.071	0.000	0.043	0.000	0.000	0.000		0.071	0.000	0.014	0.000	0.000
03-May-20	T-500	11	4:48:22	4:50:10	772781.00	5269802.00	772736.00	5269818.00	0	0	0	100	0	0	47.8	68.8	0.058	0.712	0.247	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.015	0.000	0.000	0.000	0.000	0.000		0.029	0.000	0.000	0.000	0.015
03-May-20	T-500	12	4:50:10	4:52:03	772736.00	5269818.00	772688.00	5269833.00	0	5	0	95	0	0	50.3	72.4	0.014	0.704	0.055	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.014	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
03-May-20	T-500	13	4:52:03	4:53:58	772688.00	5269833.00	772644.00	5269853.00	0	5	0	95	0	0	48.3	69.6	0.057	1.264	0.086	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.057	0.000	0.000	0.000	0.000
03-May-20	T-500	14	4:53:58	4:55:42	772644.00	5269853.00	772593.00	5269860.00	0	0	5	95	0	0	51.5	74.1	0.067	0.513	0.040	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.081	0.000	0.000	0.000	0.000
03-May-20	T-500	15	4:55:42	4:57:51	772593.00	5269860.00	772541.00	5269876.00	0	5	5	90	0	0	54.4	78.3	0.166	2.004	0.026	0.000	0.000		0.013	0.000	0.000	0.000	0.000		0.013	0.000	0.026	0.000	0.000	0.000		0.026	0.000	0.000	0.000	0.000
03-May-20	T-700	1	3:23:00	3:25:20	772484.00	5269680.00	772530.00	5269665.00	0	5	5	90	0	0	48.4	69.7	0.000	0.545	1.435	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.014
03-May-20	T-700	2	3:25:20	3:27:26	772530.00	5269665.00	772579.00	5269649.00	0	5	0	95	0	0	51.5	74.2	0.054	0.889	0.040	0.000	0.000		0.013	0.000	0.000	0.000	0.000		0.000	0.000	0.013	0.000	0.000	0.000		0.027	0.013	0.000	0.000	0.000
03-May-20	T-700	3	3:27:26	3:29:35	772579.00	5269649.00	772627.00	5269635.00	0	5	10	85	0	0	50.0	72.0	0.028	0.639	0.042	0.000	0.000		0.042	0.000	0.000	0.000	0.000		0.000	0.000	0.028	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
03-May-20	T-700	4	3:29:35	3:31:53	772627.00	5269635.00	772667.00	5269624.00	0	5	0	95	0	0	41.5	59.7	0.067	3.381	0.050	0.000	0.000		0.017	0.000	0.000	0.000	0.000		0.017	0.000	0.000	0.000	0.000	0.000		0.017	0.000	0.000	0.000	0.017
03-May-20	T-700	5	3:31:53	3:34:04	772667.00	5269624.00	772721.00	5269611.00	0	0	10	90	0	0	55.5	80.0	0.063	1.338	0.025	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.088	0.000	0.000	0.000	0.000	0.000		0.050	0.000	0.013	0.000	0.000
03-May-20	T-700	6	3:34:04	3:36:14	772721.00	5269611.00	772769.00	5269596.00	0	0	5	95	0	0	50.3	72.4	0.028	0.856	0.014	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.041	0.000	0.000
03-May-20	T-700	7	3:36:14	3:38:29	772769.00	5269596.00	772818.00	5269583.00	0	5	5	90	0	0	50.7	73.0	0.027	1.110	0.014	0.000	0.000		0.041	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.000	0.000	0.000
03-May-20	T-700	8	3:38:29	3:40:33	772818.00	5269583.00	772866.00	5269568.00	0	0	5	95	0	0	50.3	72.4	0.014	0.787	0.055	0.000	0.014		0.041	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.041	0.000	0.014	0.000	0.014
03-May-20	T-700	9	3:40:33	3:42:36	772866.00	5269568.00	772912.00	5269553.00	0	0	5	95	0	0	48.4	69.7	0.201	2.397	0.029	0.000	0.000		0.043	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.043	0.000	0.000
03-May-20	T-700	10	3:42:36	3:44:46	772912.00	5269553.00	772960.00	5269540.00	0	10	5	85	0	0	49.7	71.6	0.293	0.587	0.028	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.335	0.000	0.112	0.000	0.000	0.056		0.014	0.000	0.000	0.000	0.000
03-May-20	T-700	11	3:44:46	3:46:49	772960.00	5269540.00	773009.00	5269525.00	0	10	5	85	0	0	51.2	73.8	0.244	6.098	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.257	0.000	0.217	0.000	0.000	0.203		0.000	0.000	0.000	0.000	0.000
03-May-20	T-700	12	3:46:49	3:48:58	773009.00	5269525.00	773059.00	5269511.00	0	10	0	95	0	0	51.9	74.8	1.244	7.182	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.241	0.000	0.428	0.000	0.000	0.094		0.067	0.000	0.000	0.000	0.000
03-May-20	T-700	13	3:48:58	3:50:52	773059.00	5269511.00	773105.00	5269497.00	0	5	0	95	0	0	48.1	69.2	0.376	7.322	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.635	0.000	0.708	0.000	0.000	0.014		0.014	0.000	0.000	0.000	0.000
03-May-20	T-700	14	3:50:52	3:54:07	773105.00	5269497.00	773157.00	5269487.00	0	5	0	95	0	0	53.0	76.3	0.039	1.246	0.013	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.052	0.000	0.039	0.000	0.000	0.000		0.052	0.000	0.000	0.000	0.026
03-May-20	T-700	15	3:54:07	3:57:17	773157.00	5269487.00	773207.00	5269472.00	0	15	5	80	0	0	52.2	75.2	0.186	6.332	0.013	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.572	0.000	0.027	0.000	0.000	0.213		0.080	0.000	0.027	0.000	0.000
03-May-20	T-1000	1	2:12:10	2:14:17	773125.00	5269186.00	773081.00	5269200.00	0	0	0	100	0	0	46.2	66.5	0.045	0.902	1.504	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.045	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1000	2	2:14:17	2:16:26	773081.00	5269200.00	773033.00	5269216.00	0	5	0	95	0	0	50.6	72.9	0.000	1.249	0.027	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.055	0.000	0.000	0.041		0.014	0.000	0.000	0.000	0.000
03-May-20	T-1000	3	2:16:26	2:18:47	773033.00	5269216.00	772983.00	5269230.00	0	5	5	90	0	0	51.9	74.8	0.067	1.739	0.040	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.107	0.000	0.013	0.000	0.000	0.067		0.027	0.000	0.000	0.000	0.000
03-May-20	T-1000	4	2:18:47	2:20:56	772983.00	5269230.00	772935.00	5269242.00	0	10	5	85	0	0	49.5	71.2	0.070	1.600	0.014	0.000	0.000		0.042	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.014
03-May-20	T-1000	5	2:20:56	2:22:56	772935.00	5269242.00	772883.00	5269255.00	0	0	5	95	0	0	53.6	77.2	0.026	0.583	0.000	0.000	0.000		0.026	0.000	0.000	0.000	0.000		0.000	0.013	0.000	0.000	0.000	0.000		0.078	0.000	0.000	0.000	0.000
03-May-20	T-1000	6	2:22:56	2:24:50	772883.00	5269255.00	772836.00	5269268.00	0	5	0	95	0	0	48.8	70.2	0.014	0.869	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.043	0.000	0.000	0.000	0.000
03-May-20	T-1000	7	2:24:50	2:26:41	772836.00	5269268.00	772789.00	5269282.00	0	0	0	100	0	0	49.0	70.6	0.014	0.736	0.014	0.000	0.000		0.028	0.000	0.000	0.000	0.000		0.042	0.000	0.014	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
03-May-20	T-1000	8	2:26:41	2:28:38	772789.00	5269282.00	772743.00	5269299.00	0	0	5	95	0	0	49.0	70.6	0.028	1.048	0.071	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000
03-May-20	T-1000	9	2:28:38	2:30:39	772743.00	5269299.00	772696.00	5269311.00	0	0	5	95	0	0	48.5	69.9	0.043	1.260	0.000	0.000	0.000		0.043	0.000	0.000	0.000	0.000		0.043	0.000	0.000	0.000	0.000	0.000		0.086	0.000	0.000	0.000	0.014
03-May-20	T-1000	10	2:30:39	2:32:34	772696.00	5269311.00	772646.00	5269323.00	0	0	0	100	0	0	51.4	74.0	0.027	0.797	0.027	0.000	0.014		0.054	0.000	0.000	0.000	0.000		0.027	0.000	0.000	0.000	0.000	0.000		0.054	0.000	0.000	0.000	0.000
03-May-20	T-1000	11	2:32:34	2:34:33	772646.00	5269323.00	772596.00	5269336.00	0	5	5	90	0	0	51.7	74.4	0.148	2.366	0.000	0.000	0.000		0.013	0.000	0.000	0.000	0.000		0.175	0.000	0.054	0.000	0.000	0.040		0.067	0.000	0.000	0.000	0.000
03-May-20	T-1000	12	2:34:33	2:36:40	772596.00	5269336.00	772548.00	5269352.00	0	5	5	90	0	0	50.6	72.9	0.302	2.416	0.082	0.000	0.000		0.027	0.000	0.000	0.000	0.000		0.014	0.000	0.041	0.000	0.000	0.041		0.041	0.000	0.014	0.000	0.000
03-May-20	T-1000	13	2:36:40	2:40:19	772548.00	5269352.00	772502.00	5269369.00	0	5	20	75	0	0	49.0	70.6	0.198	2.110	0.014	0.000	0.000		0.042	0.000	0.000	0.000	0.000		0.085	0.000	0.000	0.000	0.000	0.014		0.057	0.000	0.014	0.000	0.000
03-May-20	T-1000	14	2:40:19	2:42:20	772502.00	5269369.00	772456.00	5269379.00	0	5	0	95	0	0	47.1	67.8	0.000	1.505	0.015	0.000	0.000		0.015	0.000	0.000	0.000	0.000		0.015	0.000	0.015	0.000	0.000	0.000		0.030	0.000	0.000	0.000	0.000
03-May-20	T-1000	15	2:42:20	2:44:31	772456.00	5269379.00	772402.00	5269398.00	0	15	5	80	0	0	57.2	82.4	0.146	4.391	0.000	0.000	0.000		0.024	0.000	0.000	0.000	0.000		0.291	0.000	0.133	0.012	0.000	0.146		0.061	0.000	0.024	0.000	0.000
03-May-20	T-1200	1	0:23:40	0:32:09	772345.00	5269200.00	772393.00	5269186.00	0	10	0	90	0	0	50.0	72.0	0.056	1.347	1.389	0.000	0.000		0.056	0.000	0.000	0.000	0.000		0.083	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	2	0:32:09	0:39:40	772393.00	5269186.00	772441.00	5269172.00	0	5	10	85	0	0	50.0	72.0	0.042	1.653	0.125	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.056	0.000	0.042	0.000	0.000	0.014		0.000	0.000	0.014	0.000	0.000
03-May-20	T-1200	3	0:39:40	0:44:24	772441.00	5269172.00	772489.00	5269157.00	0	5	5	90	0	0	50.3	72.4	0.055	1.160	0.041	0.000	0.000		0.055	0.000	0.000	0.000	0.000		0.069	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.014	0.000	0.000
03-May-20	T-1200	4	0:44:24	0:48:55	772489.00	5269157.00	772535.00	5269146.00	0	10	0	90	0	0	47.3	68.1	0.015	0.675	0.088	0.000	0.000		0.088	0.000	0.000	0.000	0.000		0.000	0.015	0.015	0.000	0.000	0.000		0.029	0.000	0.029	0.000	0.015
03-May-20	T-1200	5	0:48:55	0:54:24	772535.00	5269146.00	772585.00	5269131.00	0	0	10	90	0	0	52.2	75.2	0.067	3.126	0.053	0.000	0.000		0.013	0.000	0.000	0.000	0.000		0.027	0.000	0.013	0.000	0.000	0.013		0.000	0.000	0.027	0.000	0.000
03-May-20	T-1200	6	0:54:24	1:03:06	772585.00	5269131.00	772632.00	5269116.00	0	10	5	85	0	0	49.3	71.0	0.141	1.717	0.028	0.000	0.042		0.028	0.000	0.000	0.000	0.000		0.197	0.000	0.014	0.000	0.000	0.070		0.014	0.000	0.000	0.000	0.000
03-May-20	T-1200	7	1:03:06	1:07:06	772632.00	5269116.00	772681.00	5269102.00	0	0	5	95	0	0	51.0	73.4	0.055	1.690	0.055	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.014	0.000	0.014	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	8	1:07:06	1:11:20	772681.00	5269102.00	772729.00	5269088.00	0	5	0	95	0	0	50.0	72.0	0.028	2.542	0.069	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.083	0.000	0.000	0.000	0.000	0.014		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	9	1:11:20	1:15:43	772729.00	5269088.00	772777.00	5269076.00	0	5	0	95	0	0	49.5	71.2	0.112	1.768	0.042	0.000	0.014		0.028	0.000	0.000	0.000	0.000		0.070	0.000	0.126	0.000	0.000	0.014		0.014	0.000	0.000	0.000	0.000
03-May-20	T-1200	10	1:15:43	1:19:58	772777.00	5269076.00	772824.00	5269062.00	0	5	5	90	0	0	49.0	70.6	0.241	2.719	0.057	0.000	0.000		0.028	0.000	0.000	0.000	0.000		0.057	0.014	0.057	0.000	0.000	0.028		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	11	1:19:58	1:22:59	772824.00	5269062.00	772871.00	5269047.00	0	5	0	95	0	0	49.3	71.0	0.070	1.436	0.014	0.000	0.000		0.014	0.000	0.000	0.000	0.000		0.014	0.000	0.028	0.000	0.000	0.070		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	12	1:22:59	1:25:57	772871.00	5269047.00	772920.00	5269034.00	0	5	0	95	0	0	50.7	73.0	0.014	0.918	0.014	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.014	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
03-May-20	T-1200	13	1:25:57	1:32:13	772920.00	5269034.00	772968.00	5269020.00	0	10	0	90	0	0	50.0	72.0	0.111	2.125	0.028	0.000	0.000		0.083	0.000	0.000	0.000	0.000		0.069	0.000	0.000	0.000	0.000	0.042		0.014	0.000	0.014	0.000	0.000
03-May-20	T-1200	14	1:32:13	1:35:16	772968.00	5269020.00	773015.00	5269008.00	0	0	0	100	0	0	48.5	69.9	0.029	1.074	0.057	0.000	0.000		0.029	0.000	0.000	0.000	0.000		0.000	0.014	0.000	0.000	0.000	0.000		0.029	0.000	0.000	0.000	0.000
03-May-20	T-1200	15	1:35:16	1:38:27	773015.00	5269008.00	773065.00	5268993.00	0	5	0	95	0	0	52.2	75.2	0.053	1.650	0.013	0.000	0.013		0.027	0.000	0.000	0.000	0.000		0.040	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.013

APPENDIX C: INVERTEBRATE DENSITY FIGURES

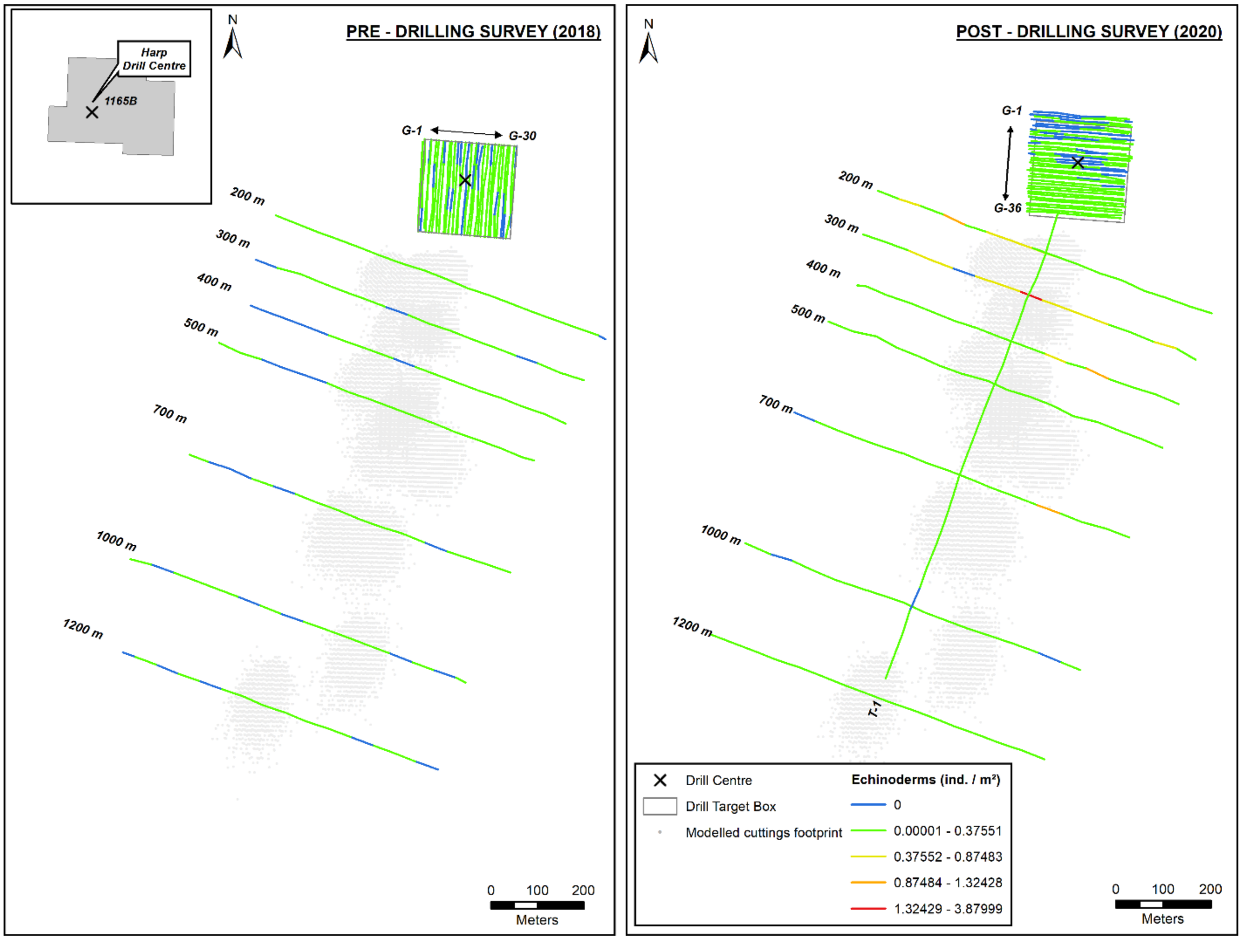

Figure C-1 Summary of echinoderm density from Harp in 2018 and 2020.

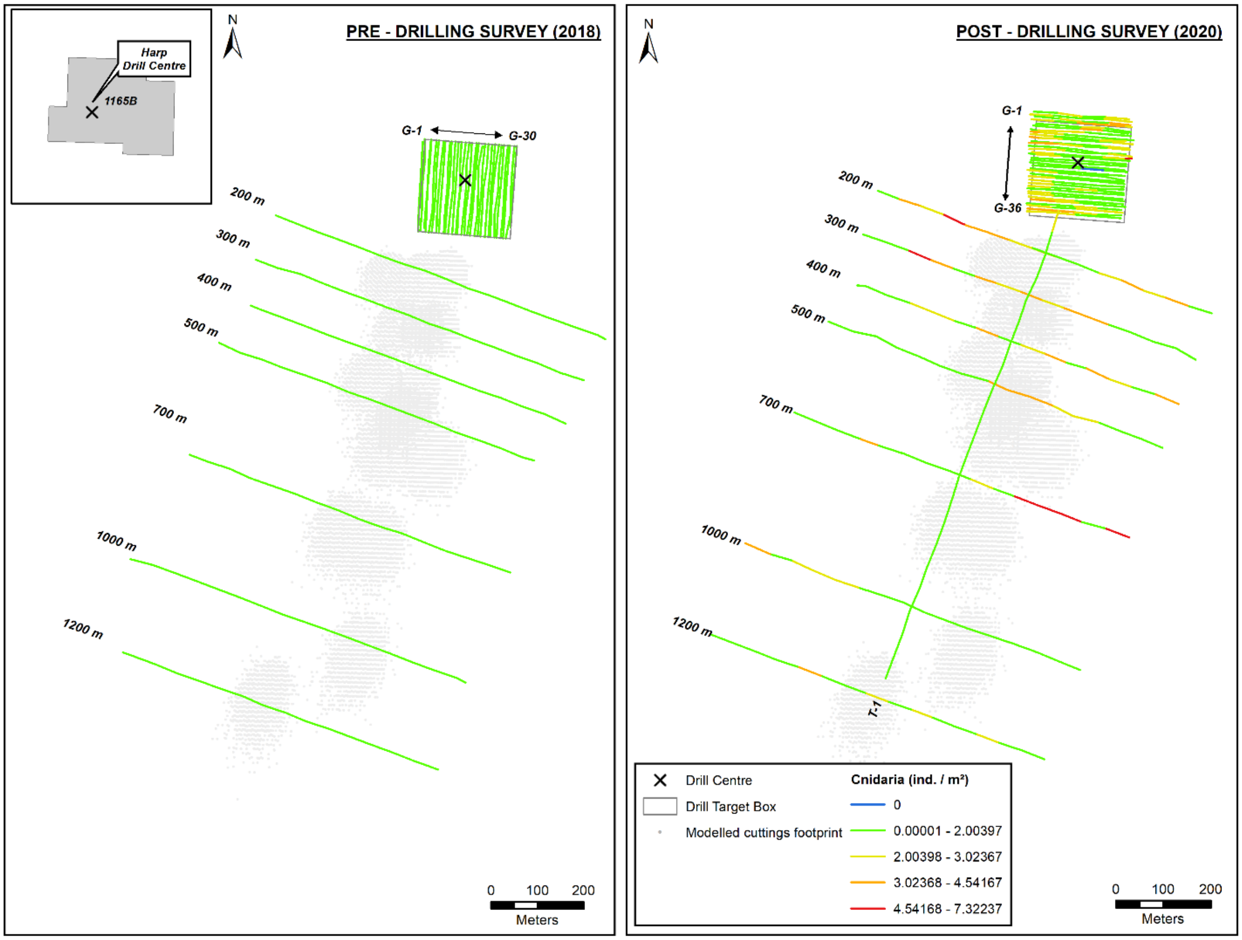

Figure C-2 Summary of cnidarian density from Harp in 2018 and 2020.

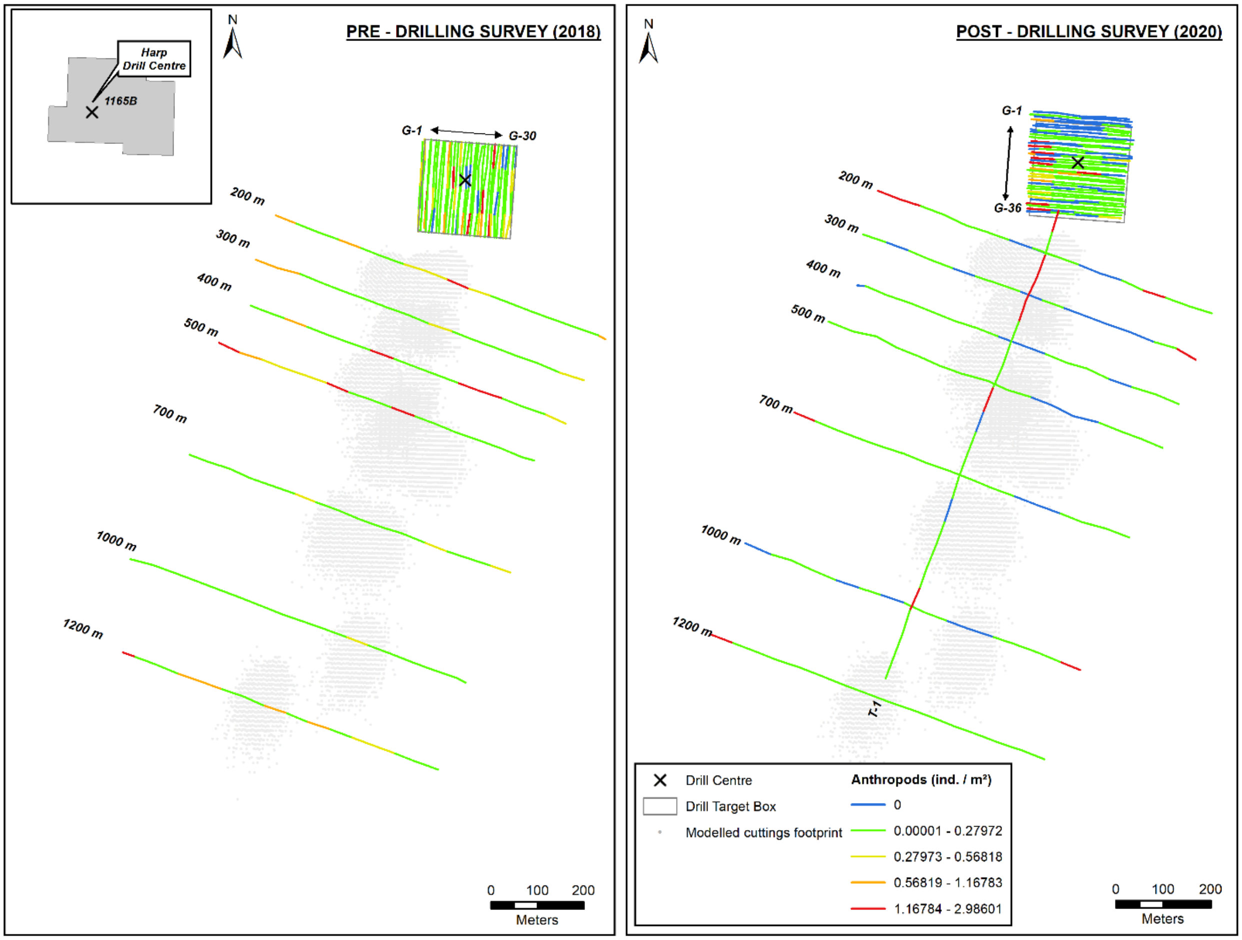

Figure C-3 Summary of arthropod density from Harp in 2018 and 2020.

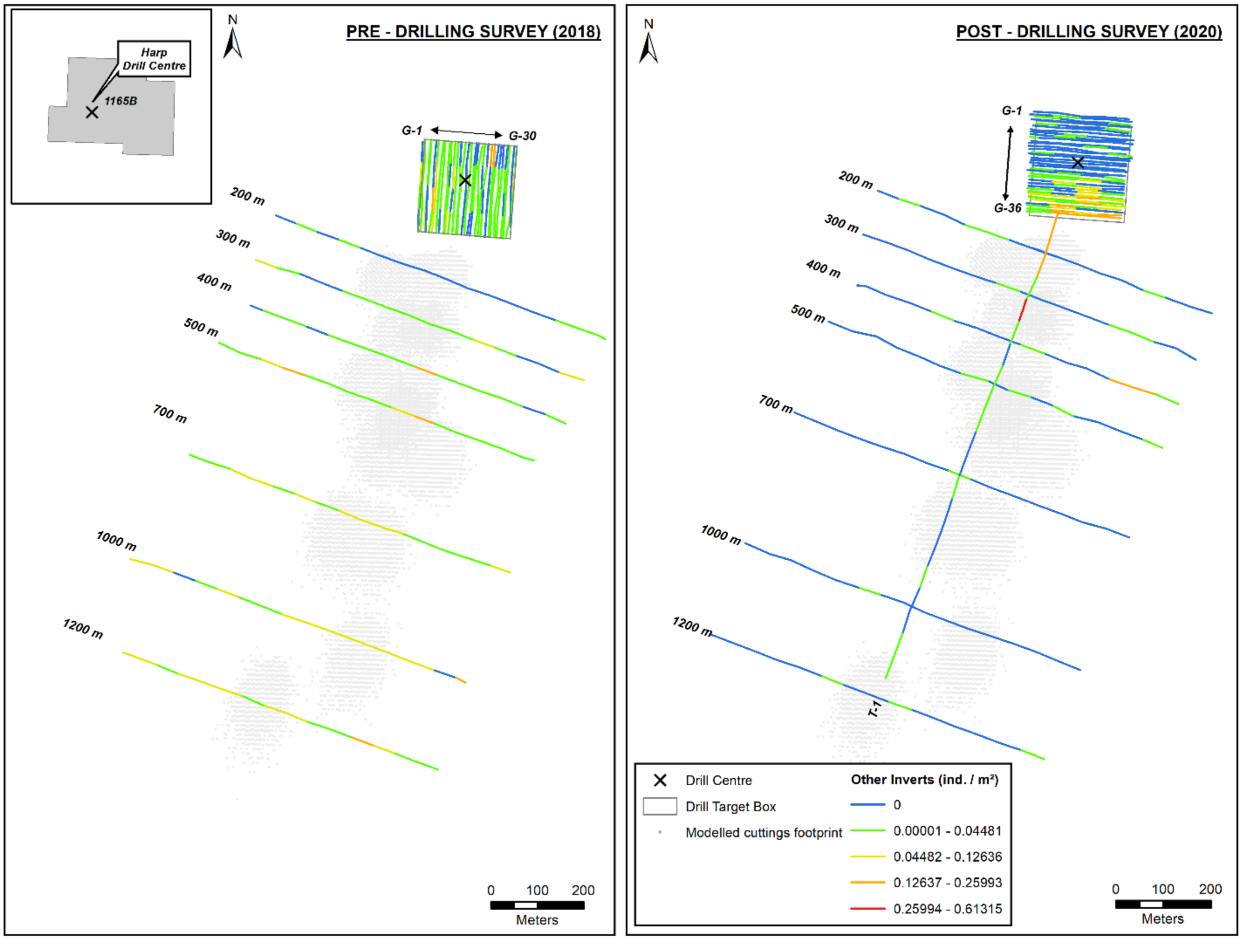

Figure C-4 Summary of other invertebrate density from Harp in 2018 and 2020.

APPENDIX D: FISH DENSITY FIGURES

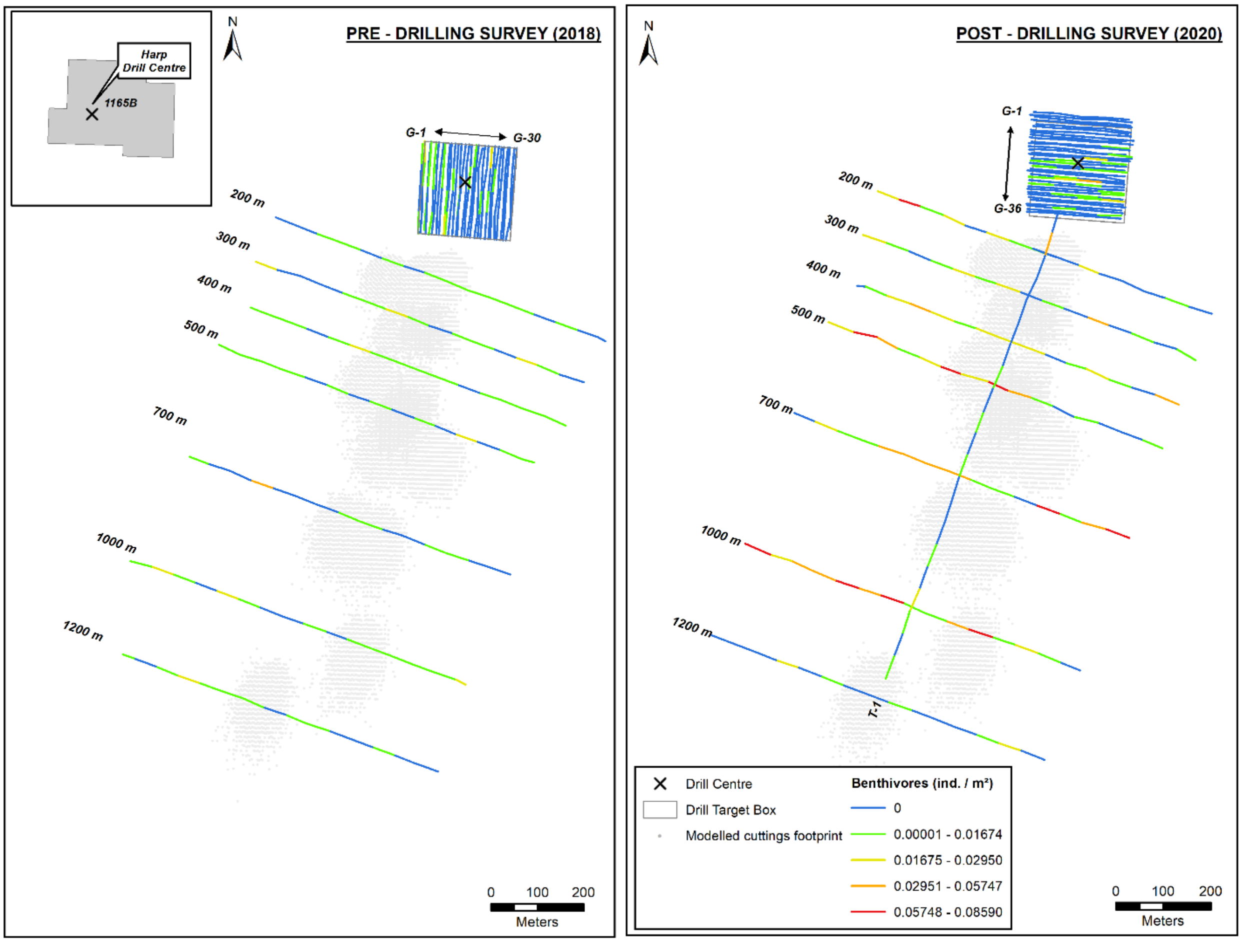

Figure D-1 Summary of benthivore density from Harp in 2018 and 2020.

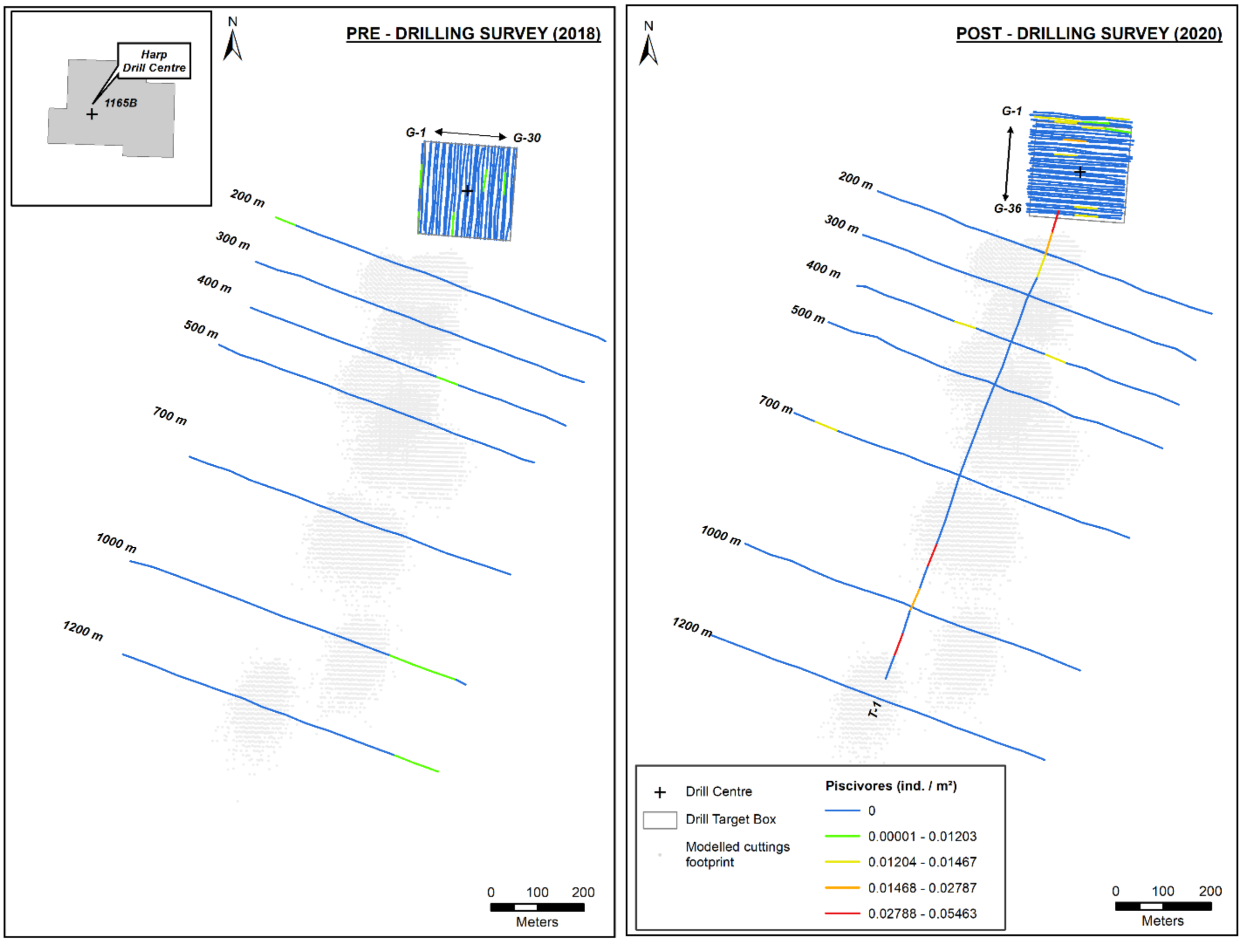

Figure D-2 Summary of piscivore density from Harp in 2018 and 2020.

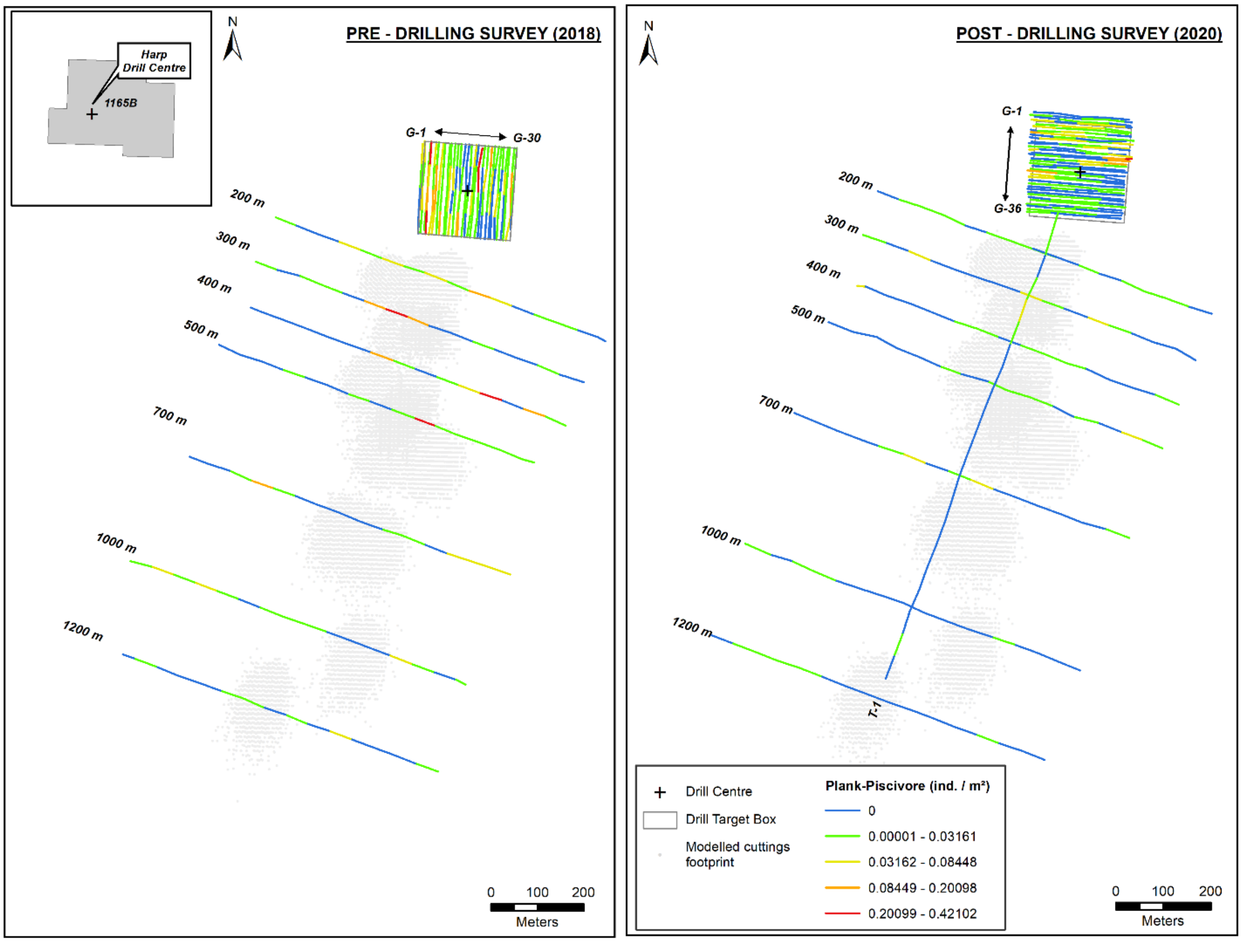

Figure D-3 Summary of plank-piscivore density from Harp in 2018 and 2020.

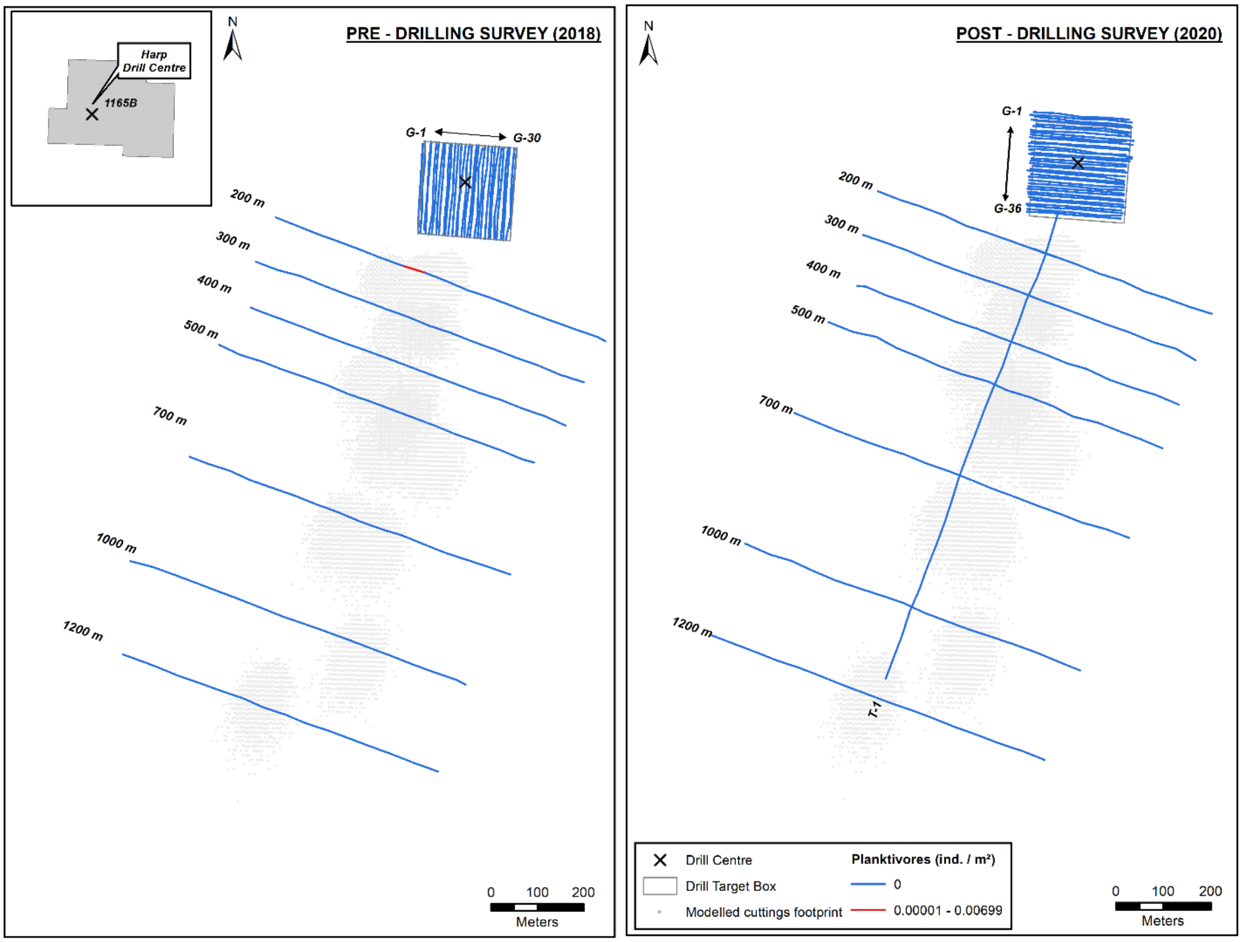

Figure D-4 Summary of planktivore density from Harp in 2018 and 2020.

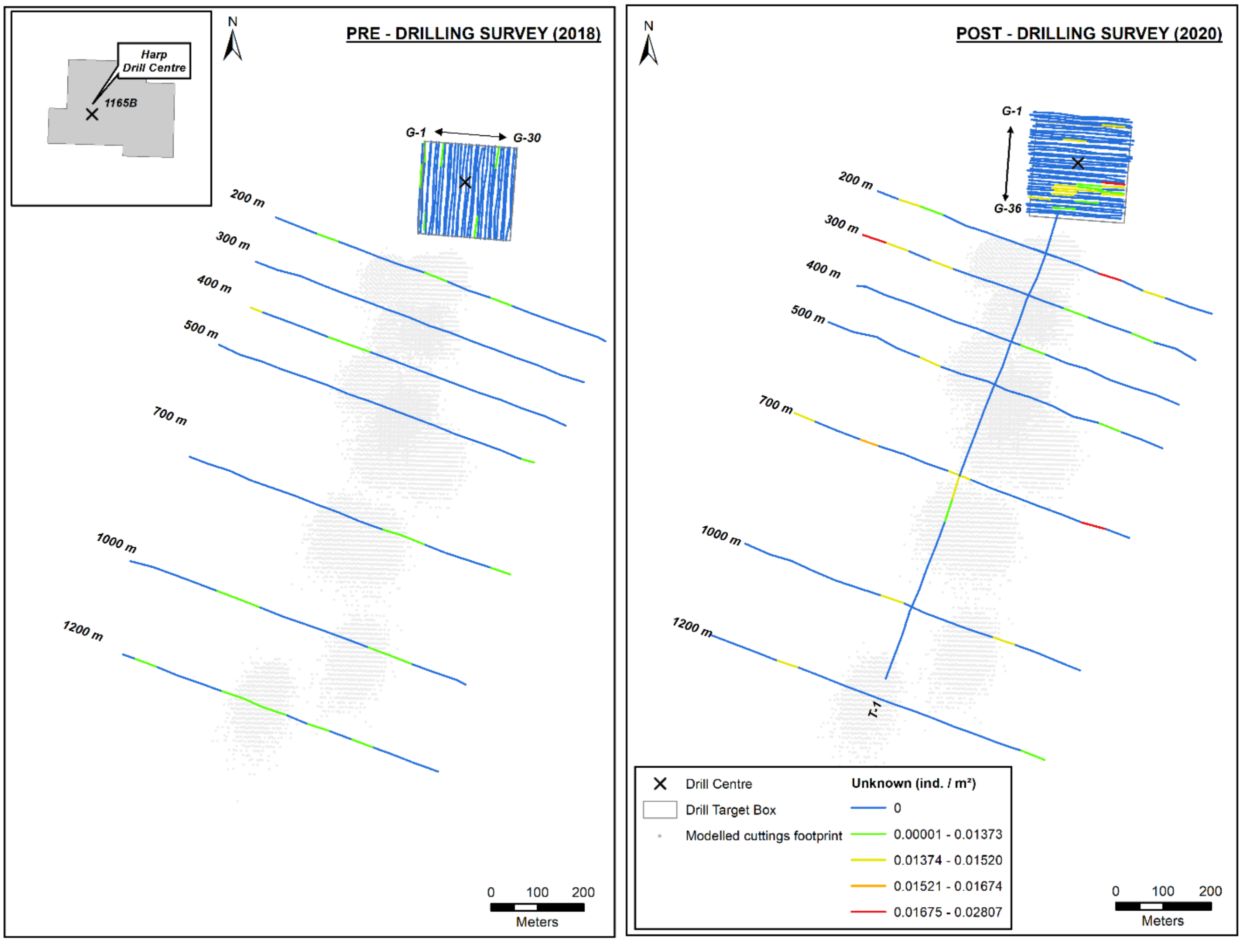

Figure D-5 Summary of unknown fish density from Harp in 2018 and 2020.