



Construction and Operations Plan

Appendix V - Benthic Resource Characterization Reports

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RENEWABLES**

Appendix V - Benthic Resource Characterization Reports

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KITTY HAWK WIND PROJECT

Benthic Assessment Report – Phase 2 Reconnaissance

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Table of Abbreviations

ANOSIM	Analysis of Similarities
BOEM	Bureau of Ocean Energy Management
C	Celsius
cm	Centimeters
CMECS	Coastal and Marine Ecological Classifications Standards
EPA	United States Environmental Protection Agency
EST	Eastern Standard Time
GPS	Global Positioning System
FGDC	Federal Geographic Data Committee
kg	Kilogram
LPTL	Lowest Practical Taxonomic Level
m	Meters
mg	Milligrams
ml	Milliliters
mm	Millimeters
NMDS	Nonmetric Multidimensional Scaling
NMFS	National Marine Fisheries Service
SIMPER	Analysis of Similarity Percentages
TOC	Total Organic Carbon

1 INTRODUCTION

RPS was contracted by TerraSond to conduct benthic grab sampling; post-process the grab data and video collected in conjunction with grabs; and compile this benthic assessment report for the survey conducted within Lease OCS-A 0508 (Kitty Hawk Wind) offshore of North Carolina in February 2020. The grab sample data and video imagery data presented will support interpretation of geophysical data to characterize surficial sediment conditions and classify the benthic habitat according to the Coastal and Marine Ecological Classifications Standards (CMECS; FGDC 2012) in accordance with Bureau of Ocean Energy Management (BOEM) guidelines and according to National Marine Fisheries Service (NMFS 2020) modified CMECS. This report provides:

- A description of the benthic grab sampling methods, results, and analyses;
- A description and analysis of the video data collected;
- The analysis of benthic macroinvertebrate data from benthic grabs using summary statistics and metrics such as taxa richness, density, community composition, etc.; and
- CMECS substrate and biotic classifications of each sampling station based on imagery and grain size results.

2 METHODS

2.1 Field Survey

2.1.1 Drop-Down Video

Drop-down, plan-view video was taken in conjunction with 49 grab samples to aid in sample collection and visual habitat classification on February 4-5, 2020. The video camera was equipped with an altimeter to record altitude, temperature probe, scale lasers mounted in parallel 0.208 meters (m) apart, lights, and a 300-foot long cable that provided real-time viewing of images on the vessel. The video camera was affixed to the grab sampler which was deployed by the TerraSond crew. At each station, the equipment was lowered until positioned 2-3 meters (m) above the seafloor and stations were confirmed free of sensitive habitat and material prohibitive to sampling (e.g., boulders, large cobbles, other hard bottom, or debris). Once the station was cleared, the sampler was deployed then hauled on-deck for processing.

While viewing the video feed for sampling suitability (i.e., if the station could be sampled with a grab sampler or not due to presence of obstructions and/or sensitive habitat), the sample information (date, time, global positioning satellite [GPS] coordinates, station ID, depth, and video file name) and initial observations of sediment/seafloor characteristics were recorded to aid in post-processing of video data. During video review, presence of potentially sensitive benthic habitats (e.g., exposed hard bottom, seagrass/kelp/algal beds, coral species), macroinvertebrates, and other characteristics were recorded, as per BOEM's Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585 (BOEM, 2019).

2.1.2 Grab Sampling

Benthic grab samples were acquired using an Ocean Instruments Salish Grab Standard SG-20 sampler. This grab is a modified version of a standard Van Veen sampler with a stainless-steel weighted frame and release system ideal for collection of sediments in soft to hard substrates with a penetration depth up to 20 centimeters (cm) and sampling area of 0.10 square meters (m²). A beacon was affixed to the grab to obtain GPS coordinates in conjunction with a pole-mounted ultra-short baseline system.

Upon retrieval, the grab sampler was examined for sample acceptability. A sample was deemed acceptable if:

- Sample was more than 50% full;
- Sample was not over penetrated (i.e., not 100% full); and
- Surface structures were undisturbed and even (i.e., not slumped).

If a sample did not fulfil these requirements, the entire contents were returned to the water and another sampling attempt was made. The results of each attempted grab were recorded in field notes.

Once an acceptable sample was obtained, the following steps were taken:

1. Overlying water was drained using a siphon;
2. A photograph was taken of the sample next to an identification label containing the station identification number and a plastic ruler inserted to record sample depth; and
3. Field notes were taken including descriptions of physical features (i.e., apparent redox potential discontinuity depth, depth of penetration, sediment color, texture, odor, surface features) and surface macrofauna, which were then returned to the water.

The grab sample was then divided into two sections using a plexiglass divider. One half of the sample was processed for physical analysis (sediment grain size and total organic carbon [TOC]). For the TOC and grain size analysis, almost the entire top 2 cm of sediment on one half of the sample was collected using a stainless-steel spoon and placed in glass jars; this resulted in approximately 250 milliliters (ml) of sediment for the grain size sample and 200 ml for the TOC sample. The grain size and TOC samples were stored on ice and sent to Eurofin Test America lab (5575 8th St. East Tacoma, WA) for processing as described in Section 2.2.

The other half of the grab sample (i.e., on the other side of the plexiglass divider) was measured for volume and processed for biological community analysis. The sample was then loaded onto a processing table and material washed in a 0.5-mm sieve, using seawater under gentle pressure. The seawater used for sample processing was filtered through a 1-mm mesh to prevent planktonic organisms from mixing with the benthic samples.

Organisms, shell fragments, and other material remaining on sieve were placed into a plastic container using stainless-steel spoon and forceps as needed. The container was filled no more than one-half to two-thirds full with the sample and 0.5-mm filtered seawater. If the quantity of sample exceeded this volume, it was placed in a second container. The sample was fixed/preserved with 10% buffered formalin solution by filling the remaining space within the bottle with solution. Containers were tightly sealed with tape and stored in a cooler at ambient temperature (not frozen or refrigerated). Prior to sieving the next sample, the sieve was cleaned by scrubbing with a stiff brush and backwashing with pressurized water. The benthic macroinvertebrate community samples were sent to EcoAnalysts (1420 S Blaine St, Ste. 14, Moscow, ID 83843) for processing as described in Section 2.2.

2.2 Lab Analysis

2.2.1 Grain Size and TOC Analysis

Grain size and TOC samples were analyzed by TestAmerica using ASTM D 422-63 Standard Method for Particle-size Analysis of Soils (ASTM, 2007). The TOC content of sediment samples was analyzed using EPA Method 9060 Puget Sound Ecosystem Program (PSEP) with results reported in milligrams per kilogram (mg/kg) and percent (EPA, 1986).

2.2.2 Benthic Macroinvertebrate Analysis

The benthic macroinvertebrate analysis was conducted by EcoAnalysts according to the following steps:

1. Benthic invertebrate samples were catalogued and verified against the Chain of Custody to ensure samples received match those listed in the shipment.
2. Samples were rinsed with freshwater to remove the formalin and transferred to 70 percent ethanol alcohol for sorting and storage.
3. Organisms were identified to the lowest practical taxonomic level (LPTL) (at least to family) and counted by taxonomists using the most appropriate taxonomic references for the region (Bousfield, 1973; Cutler, 1994; Winston and Hayward, 2012).
4. Species classification and abundance were recorded in Project data sheets and summarized in both tabular and graphical formats.
5. Prior to performing the invertebrate data analyses, the overall dataset was scanned for non-benthic taxa (i.e., pelagic or planktonic organisms) that were excluded from all analyses; examples include chaetognaths, hyperiid amphipods, and decapod zoea/megalopae.
6. Calculations of abundance included all taxa occurring in each sample, whether those taxa were identified to species level or not.

2.3 Video Post-Processing

Post-processing of video data was conducted by RPS to provide:

- General characterization of substrate including bottom type, texture, micro-topography, and presence and approximate thickness (absent, light, moderate, or heavy) of sedimentation (“drape”) covering hard substrates;
- Evidence of benthic activity by organisms (burrows, trails, biogenic reefs);
- Identification of epibenthic macroinvertebrates (decapod crustaceans, mollusks [including squid mops], echinoderms, etc.) and habitat, benthic features (e.g., sand waves), and other important biogenic habitat (i.e., structure formed by organisms);
- Presence/evidence and general characterization of submerged aquatic vegetation (macroalgae, sea grass);
- Identification of fish and fish habitat (where feasible) as classified by Auster (1998);

- Identification of visible organisms to the lowest practical taxonomic level (at least to family) using standard taxonomic keys for the geographic area;
- Evidence of fishing activity, such as trawl scars, pots, and working nets; and
- Presence of derelict fishing gear, military expended materials, shipwrecks, cultural artifacts, or other marine debris.

The still imagery data were analyzed according to the following steps:

1. A single still image was analyzed from each station by selecting the first clear view of the seafloor from the video at each grab station, with camera positioned approximately 0.5 m above the seafloor.
2. The visible area of each still image was defined, measured, and reviewed for evidence of benthic species and activity, submerged aquatic vegetation (macroalgae, sea grass), fishing activity, derelict gear, military expended materials, shipwrecks, and other marine debris and presence/absence of these features were noted. In some instances of poor visibility, video was used in addition to still images to determine presence or absence.
3. Selected stills were broadly characterized by texture, microtopography, and presence of coral heads/reefs, rock outcroppings, and other shelter-forming features.

2.4 Benthic Community Data Post-Processing

The benthic community analysis was based on the benthic macroinvertebrate laboratory data from EcoAnalysts. Macroinvertebrate community statistics were calculated using family (or next lowest taxonomic level possible based on LPTL) abundance estimates in each sample, which were reported as count per 0.05 m² grab sample (i.e., the half of the grab sample processed for biological analysis). Community composition parameters included: total abundance, number of phyla, number of taxa, Margalef's Richness Index, Shannon Diversity Index, and Pielou's Index of Evenness for each station.

2.4.1 Taxonomic Composition

Benthic macroinvertebrate taxonomic composition was assessed to characterize the high-level trends in community data. Community composition summaries included summaries of each station and of the entire survey aggregated at both phylum-level and LTPL.

2.4.2 Richness, Diversity, and Evenness

Taxonomic richness, evenness, and diversity are common ecological parameters used to measure the overall biodiversity of a community or discrete unit. Taxonomic richness is the number of unique species or taxonomic groups represented in an area of interest. In this assessment, taxonomic richness was calculated using Margalef's Richness Index (Formula 1) for each station to acquire individual and average richness indices calculated using family (or next lowest taxonomic level possible based on LPTL) abundances.

Formula 1. Margalef's Richness Index (RI).

$$RI = \frac{(S - 1)}{\ln(N)}$$

Where:

S= the number of taxa

N = the total number of individuals in the sample

Interpretation: The higher the index, the greater the taxonomic richness.

The diversity index for a community considers taxonomic richness and the proportion of each unique taxa. The Shannon Diversity Index (H' ; Formula 2) was calculated using the number of each taxa (family or LPTL), the proportion of each taxa relative to the total number of individuals, and the sum of the proportions. This index was used to assess diversity of each station. The diversity index (H') increases with increasing taxonomic richness and evenness.

Formula 2. H' - Shannon Diversity Index.

$$H' = - \sum_{i=1}^N p_i \ln(p_i)$$

Where:

p_i is the proportion of individuals belonging to taxa i in the dataset of interest

Interpretation: The greater the H' , the greater the richness and evenness.

Evenness of a community refers to the similarity in abundances of different species comprising a community or sample. Pielou's Index of Evenness (J' ; Formula 3) includes H' (Shannon-Weiner Diversity Index) in its calculation.

Formula 3. J' - Pielou's Index of Evenness.

$$J' = \frac{H'}{H_{\text{Max}}}$$

Where:

H' is the Shannon-Weiner Diversity Index

H_{Max} is the maximum possible value of H' , where each species/taxa occurs in equal abundances.

$$H_{\text{Max}} = \ln(s)$$

Where: s = Number of species

Interpretation: J' is constrained between 0 and 1. The greater the value of J' , the more evenness in the sample.

2.4.3 Multivariate Analysis

Multivariate analyses were conducted in R (programming language) (Oksanen et al., 2019; R Core Team, 2020) to examine dissimilarity/similarity of stations based on the invertebrate assemblages (composition of all taxa and their abundances). These analyses included nonmetric multidimensional scaling (NMDS), analysis of similarities (ANOSIM), and analysis of similarity percentages (SIMPER; Clarke, 1993). All analyses were built on a Bray-Curtis Similarity Index, using a square-root transformation of the data to ensure all taxa (not just those that dominated samples) would contribute to similarity measures. As with the community indices, invertebrate data were limited to the family level or next lowest LPTL. Differences

in assemblages between stations were compared and assessed using NMFS (2020) modified CMECS substrate classifications.

Two dimensional NMDS was used to visually compare the ordinate distance (difference) between samples and evaluate the similarity of community assemblages. Samples were ordinated based on similarity to one another with samples of higher similarity appearing in closer proximity to one another in NMDS plots. Samples were also colored according to assigned NMFS (2020) modified CMECS classifications.

SIMPER was used to identify the percent dissimilarity between assemblages within NMFS (2020) modified CMECS substrate components and to identify taxa that were most responsible for that dissimilarity (i.e., the taxa with the largest differences in mean abundance). ANOSIM was used to help determine if season, depth, or substrate classifications were predictive of the invertebrate assemblage clusters. The test statistic (R values) calculated in the Global ANOSIM indicates whether samples within classification groups were more similar than samples between groups. R values closer to 1 with significance levels of $p < 0.05$ indicate that samples within a classification group are more similar to each other than to those in different groups. R values closer to 0 indicate samples are equally similar within a classification group as they are between different groups. Specifically, ANOSIM was used to test the null hypothesis:

H_0 : The similarity of invertebrate assemblages between NMFS CMECS groups is greater than or equal to the similarity within NMFS CMECS groups.

3 RESULTS

All samples were collected on February 4-5, 2020. Sampling stations were located in waters between 10 and 46 m deep with bottom temperatures between 7.9 and 10.8°C (Table 3-1, Figure 3-1). Note that latitude and longitude values may differ slightly (by a few meters at most) from those overlaid onto images due to a slight time lag associated with the video feed.

Table 3-1. Grab sample station locations and characteristics.

Station	Date	Time (EST)	Latitude (°N, NAD83 2011 UTM Zone 18)	Longitude (°W, NAD83 2011 UTM Zone 18)	Depth (m)	Temp. (°C)	Penetration Depth (mm)	Invertebrate Sample Volume (m ³)
1	02/04/20	16:21:00	36.29020	75.08876	N/A	10.16	70	0.0024
2	02/04/20	3:46:00	36.31163	75.00535	42	10.68	63	0.0021
3	02/04/20	4:07:00	36.29624	75.00798	43	10.49	89	0.0036
4	02/04/20	4:43:00	36.27485	75.01886	44	10.50	82	0.0042
5	02/04/20	5:13:00	36.24870	75.03309	44	10.14	52	0.0024
6	02/04/20	10:54:00	36.24472	75.00543	41	10.59	52	0.0024
7	02/04/20	10:00:00	36.22849	75.01916	42	10.31	55	0.0030
8	02/04/20	14:45:00	36.19218	75.03325	42	10.34	115	0.0036
9	02/04/20	9:04:00	36.19153	75.00487	44	10.38	86	0.0027
10	02/04/20	8:33:00	36.16116	75.00465	42	10.61	65	0.0024
11	02/04/20	13:52:00	36.23848	75.06060	N/A	10.27	90	0.0030
12	02/04/20	13:07:00	36.28860	75.06103	46	10.21	70	0.0024
13	02/04/20	2:03:00	36.37869	75.06080	39	10.78	62	0.0024
14	02/04/20	18:09:00	36.34120	75.14026	34	10.05	75	0.0018
15	02/04/20	0:39:00	36.41104	75.13129	32	10.06	75	0.0021
16	02/04/20	19:38:00	36.40878	75.18838	34	9.68	90	0.0027
17	02/04/20	19:00:00	36.36870	75.18809	37	9.86	70	0.0012
18	02/04/20	23:44:00	36.47621	75.33841	26	9.68	90	0.0024
19	02/05/20	0:39:00	36.49041	75.38307	23	9.59	65	0.0021
20	02/05/20	1:21:00	36.50718	75.43467	27	9.50	85	0.0030
21	02/05/20	2:12:00	36.52364	75.48689	29	9.30	90	0.0027
22	02/05/20	3:06:00	36.54006	75.53886	26	9.15	45	0.0018
23	02/05/20	4:41:00	36.57295	75.64201	24	8.48	60	0.0024
24	02/05/20	5:55:00	36.58973	75.69445	18	8.22	78	0.0024
25	02/05/20	6:37:00	36.60582	75.74686	22	8.26	47	0.0015

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Station	Date	Time (EST)	Latitude (°N, NAD83 2011 UTM Zone 18)	Longitude (°W, NAD83 2011 UTM Zone 18)	Depth (m)	Temp. (°C)	Penetration Depth (mm)	Invertebrate Sample Volume (m ³)
26	02/05/20	7:02:00	36.61665	75.77730	21	8.13	45	0.0015
27	02/05/20	7:46:00	36.64851	75.81702	18	8.10	61	0.0021
28	02/05/20	8:24:00	36.68048	75.85677	14	8.03	55	0.0012
29	02/05/20	9:23:00	36.70996	75.89754	14	8.22	85	0.0027
30	02/05/20	9:44:00	36.72397	75.91918	10	8.01	80	0.0021
31	02/05/20	0:04:00	36.48230	75.35740	30	9.61	90	0.0036
32	02/05/20	1:48:00	36.51537	75.46115	28	9.33	85	0.0027
33	02/05/20	3:37:00	36.54826	75.56480	23	8.76	78	0.0030
34	02/05/20	12:40:00	36.58161	75.66904	23	8.65	85	0.0012
35	02/05/20	7:24:00	36.63256	75.79711	17	8.13	95	0.0033
36	02/05/20	8:54:00	36.69544	75.87574	14	7.92	110	0.0024
37	02/04/20	21:29:00	36.42906	75.27438	35	9.50	77	0.0030
38	02/04/20	23:05:00	36.46603	75.30621	32	9.59	70	0.0024
39	02/04/20	17:14:00	36.29243	75.13117	39	10.10	55	0.0012
40	02/04/20	12:25:00	36.31884	75.06683	42	10.32	46	0.0015
41	02/04/20	2:54:00	36.35494	75.04731	37	N/A	77	0.0030
42	02/05/20	4:04:00	36.55741	75.59389	24	8.65	50	0.0024
43	02/04/20	11:45:00	36.29624	75.03638	N/A	10.45	45	0.0015
44	02/04/20	14:19:00	36.21216	75.04672	38	10.25	40	0.0012
45	02/04/20	22:41:00	36.45372	75.29028	31	9.50	50	0.0012
46	02/04/20	21:07:00	36.40869	75.27417	33	9.54	90	0.0027
47	02/04/20	19:58:00	36.41417	75.20985	35	9.76	80	0.0024
48	02/04/20	20:31:00	36.38614	75.23425	37	9.77	95	0.0030
49	02/04/20	22:12:00	36.43108	75.30845	29	9.51	70	0.0012

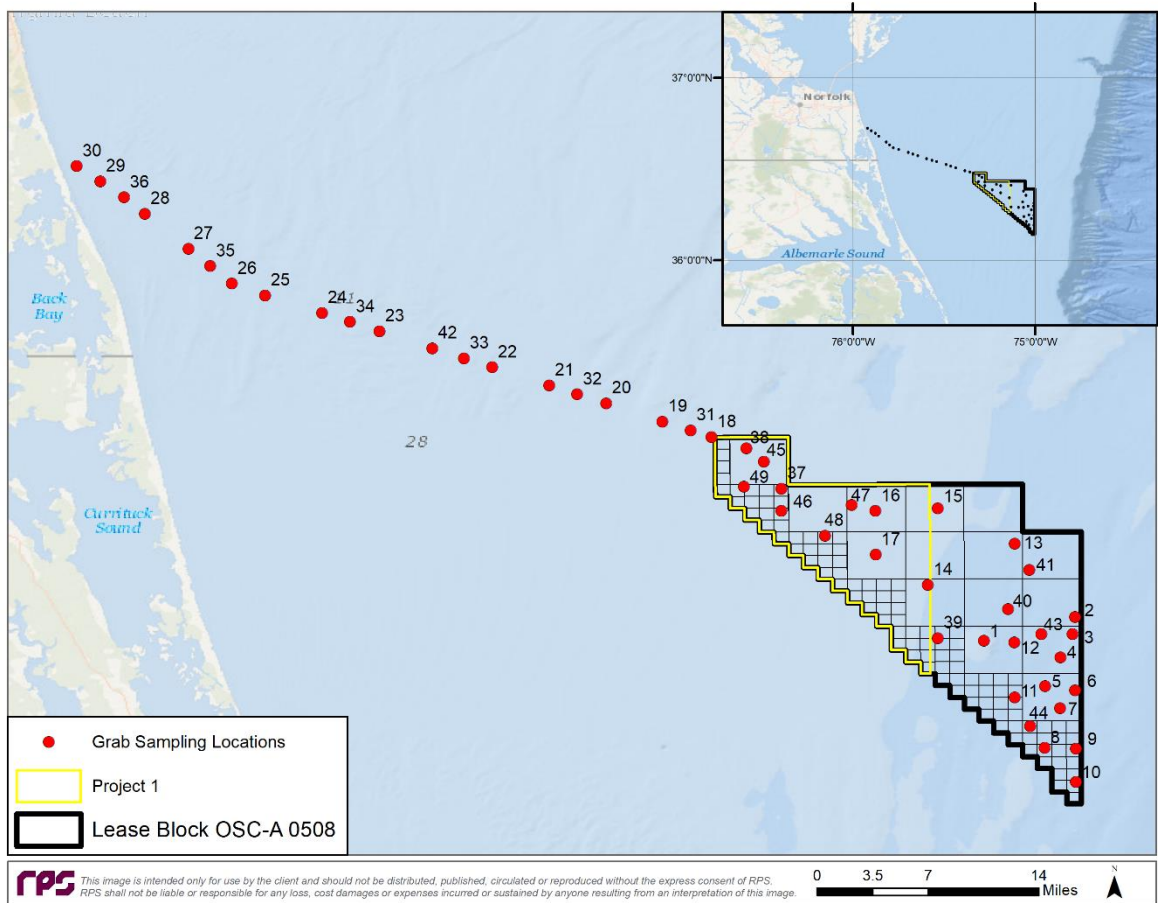


Figure 3-1. Grab sample station locations.

3.1 Visual Analysis

The following sections display and describe still images taken from a video camera affixed to the grab sampler. Note that Parallel-mounted lasers are 0.208 m apart.

Still images were successfully captured and analyzed for all 49 stations (Table 3-2 to Table 3-50). Small demersal fish (roughly 3-5 cm) were observed at multiple sampling stations. These fish often appeared to potentially be juvenile hake; however, this could not be confirmed due to their small size and quick movement. A few colonies of bushy plant-like organisms, likely hydrozoans or possibly bryozoans, were present at a few stations with hermit crabs also appearing multiple times throughout the sampling. Presence of benthic activity by organisms (burrows, trails, biogenic reefs) were limited to a few worm tubes and one small burrow or worm tube. There was no evidence of submerged aquatic vegetation (macroalgae, sea grass), fishing activity, derelict fishing gear, military expended materials, shipwrecks, important biogenic habitat, or other marine debris.

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Overall, the geologic origin substrate in most images was generally composed of sand that ranged in relief from flat to small sand waves with most images containing some degree of sand ripples. The majority of images contained some degree of shell hash or cobble from multiple species or origin with some samples containing primarily shell debris. Complex habitat, as defined by NMFS (2020), was either visually apparent or classified as complex based on grain size analyses at 22 sample stations in the form of gravel mixes (sandy gravel), gravelly (gravelly sand), and shell (>50%) substrate.

Table 3-2. Visual characterization of still image associated with Station GB01.

		Characteristic	Description
General Characterization: Light-colored flat sand with sparse shell hash			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,288 cm ²

Table 3-3. Visual characterization of still image associated with Station GB02.


		Characteristic	Description
General Characterization: gray-brown colored sand/silt with moderate shell hash and rubble			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Shell aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be shell substrate	
	Field of View	1,615 cm ²	

Table 3-4. Visual characterization of still image associated with Station GB03.


		Characteristic	Description
General Characterization: Light-colored sand with brown patches of finer substrate and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash	
	Field of View	1,578 cm ²	

Table 3-5. Visual characterization of still image associated with Station GB04.


		Characteristic	Description
General Characterization: Light-colored sand with brown patches of finer substrate and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,571 cm ²	

Table 3-6. Visual characterization of still image associated with Station GB05.


		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (sand ripples less than a few cm) and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash	
	Field of View	1,703 cm ²	

Table 3-7. Visual characterization of still image associated with Station GB06.


		Characteristic	Description
General Characterization: Shell hash and rubble with sparse light-colored sand			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Shell aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with moderate shell hash	
	Field of View	1,646 cm ²	

Table 3-8. Visual characterization of still image associated with Station GB07.

		Characteristic	Description
General Characterization: Light-colored sand and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash	
	Field of View	1,489 cm ²	

Table 3-9. Visual characterization of still image associated with Station GB08.

		Characteristic	Description
<p>General Characterization: Shell hash with sparse gravel and sand arranged in waves (a few cm tall). Multiple worm tube openings visible.</p>			
		Biotic Benthic Activity	Worm tubes
		Epibenthic Macroinvertebrates and Fishes	Grab collected a nudibranch (likely <i>Pleurobranchaea tarda</i>) – percent cover of ~1%
		Macroinvertebrate and Fish Habitat	Shell aggregate/sand waves
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	Yes – Sandy Gravel according to grain size, but appears to shell substrate
		Field of View	2,424 cm ²

Table 3-10. Visual characterization of still image associated with Station GB09.


		Characteristic	Description
<p>General Characterization: Light-colored sand with moderate shell hash. Note that video time, date, and location froze during sampling at values shown.</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	Yes – Sandy Gravel according to grain size, but appears to be Gravelly Sand with moderate shell hash
		Field of View	1,632 cm ²

Table 3-11. Visual characterization of still image associated with Station GB10.

		Characteristic	Description
General Characterization: Light-colored sand and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand	
	Field of View	1,480 cm ²	

Table 3-12. Visual characterization of still image associated with Station GB11.


		Characteristic	Description
General Characterization: Shell hash and rubble with sparse light-colored sand			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Shell Aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand or gravelly sand with sparse to moderate shell hash	
	Field of View	1,925 cm ²	

Table 3-13. Visual characterization of still image associated with Station GB12.

		Characteristic	Description
General Characterization: Light-colored sand with brown patches of finer material and sparse shell rubble			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,247 cm ²

Table 3-14. Visual characterization of still image associated with Station GB13.


		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (ripples less than a few cm) and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,613 cm ²	

Table 3-15. Visual characterization of still image associated with Station GB14.

		Characteristic	Description
General Characterization: Shell hash and rubble with trace sand/silt			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Shell aggregate/flat sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand or slightly gravelly sand with moderate shell hash	
	Field of View	1,738 cm ²	

Table 3-16. Visual characterization of still image associated with Station GB15.


	Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) with suspended organic debris and trace shell hash</p>		
	<p>Biotic Benthic Activity</p>	<p>Small burrow or worm tube visible in center of image</p>
	<p>Epibenthic Macroinvertebrates and Fishes</p>	<p>~40 cm unidentified fish visible as bottom came into view.</p>
	<p>Macroinvertebrate and Fish Habitat</p>	<p>Flat Sand</p>
	<p>Aquatic Vegetation</p>	<p>None detected</p>
	<p>Evidence of Fishing Activity</p>	<p>None detected</p>
	<p>Anthropogenic Debris</p>	<p>None detected</p>
	<p>Complex Habitat (NMFS 2020)</p>	<p>None detected</p>
	<p>Field of View</p>	<p>NA</p>

Table 3-17. Visual characterization of still image associated with Station GB16.

	Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) with suspended organic debris and trace shell hash</p>		
	<p>Biotic Benthic Activity</p>	<p>None detected</p>
	<p>Epibenthic Macroinvertebrates and Fishes</p>	<p>None detected</p>
	<p>Macroinvertebrate and Fish Habitat</p>	<p>Flat Sand</p>
	<p>Aquatic Vegetation</p>	<p>None detected</p>
	<p>Evidence of Fishing Activity</p>	<p>None detected</p>
	<p>Anthropogenic Debris</p>	<p>None detected</p>
	<p>Complex Habitat (NMFS 2020)</p>	<p>None detected</p>
	<p>Field of View</p>	<p>1,553 cm²</p>

Table 3-18. Visual characterization of still image associated with Station GB17.

	Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) with suspended organic debris and trace shell hash		
	Biotic Benthic Activity	None detected
	Epibenthic Macroinvertebrates and Fishes	None detected
	Macroinvertebrate and Fish Habitat	Flat Sand
	Aquatic Vegetation	None detected
	Evidence of Fishing Activity	None detected
	Anthropogenic Debris	None detected
	Complex Habitat (NMFS 2020)	None detected
	Field of View	1,604 cm ²

Table 3-19. Visual characterization of still image associated with Station GB18.


		Characteristic	Description
General Characterization: Light-colored sand with small sand ripples (less than a few cm) and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,581 cm ²	

Table 3-20. Visual characterization of still image associated with Station GB19.


		Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) with suspended organic debris and trace shell hash</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,513 cm ²

Table 3-21. Visual characterization of still image associated with Station GB20.

		Characteristic	Description
General Characterization: Light-colored sand with sand ripples (less than a few cm) and suspended organic debris and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Hermit crab – percent cover of ~1% and two 3 cm demersal fish (possible hake) visible	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,526 cm ²	

Table 3-22. Visual characterization of still image associated with Station GB21.

		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) with suspended organic debris and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Two 3 cm demersal fish (possible hake) visible	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,620 cm ²	

Table 3-23. Visual characterization of still image associated with Station GB22.


		Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and suspended organic debris and trace shell hash</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	4 cm demersal fish visible as bottom came into view
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash
		Field of View	1,546 cm ²

Table 3-24. Visual characterization of still image associated with Station GB23.

		Characteristic	Description
<p>General Characterization: Light-colored sand with small sand ripples (less than a few cm) and suspended organic debris and trace shell hash</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,559 cm ²

Table 3-25. Visual characterization of still image associated with Station GB24.


		Characteristic	Description
General Characterization: Light-colored sand with dark patches and small sand ripples (less than a few cm) and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Bushy plant-like stalked organism (lower left corner of image) – percent cover of <1%	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,520 cm ²	

Table 3-26. Visual characterization of still image associated with Station GB25.

		Characteristic	Description
General Characterization: Light-colored sand with sand ripples (less than a few cm) and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Hermit crab (bottom of image) – percent cover of ~1%	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,624 cm ²	

Table 3-27. Visual characterization of still image associated with Station GB26.


		Characteristic	Description
General Characterization: Shell hash with gray/brown silt/sand and gravel.			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Bushy hydrozoa/bryozoa present – percent cover of 10%	
	Macroinvertebrate and Fish Habitat	Shell aggregate/Flat sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Sandy Gravel according to grain size, but may be gravelly sand with moderate shell hash	
	Field of View	2,368 cm ²	

Table 3-28. Visual characterization of still image associated with Station GB27.

		Characteristic	Description
General Characterization: Shell hash and cobble with light-colored sand			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat sand/shell aggregate
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	Yes – Sandy Gravel according to grain size
		Field of View	2,573 cm ²

Table 3-29. Visual characterization of still image associated with Station GB28.


		Characteristic	Description
General Characterization: Shell hash and cobble with light-colored sand/silt			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Bushy hydrozoa/bryozoa present – percent cover of ~2%	
	Macroinvertebrate and Fish Habitat	Flat sand/shell aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but may be sand with moderate shell hash based on appearance	
	Field of View	3,496 cm ²	

Table 3-30. Visual characterization of still image associated with Station GB29.

		Characteristic	Description
General Characterization: Light-colored sand with small sand waves and trace shell hash			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Sand waves
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,635 cm ²

Table 3-31. Visual characterization of still image associated with Station GB30.

		Characteristic	Description
General Characterization: Light-colored sand with small sand waves and trace shell hash			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,587 cm ²

Table 3-32. Visual characterization of still image associated with Station GB31.

	Characteristic	Description
General Characterization: Light-colored sand with sand ripples (less than a few cm) and suspended organic debris and trace shell hash		
	Biotic Benthic Activity	None detected
	Epibenthic Macroinvertebrates and Fishes	4 cm demersal fish (on right side of image)
	Macroinvertebrate and Fish Habitat	Flat Sand
	Aquatic Vegetation	None detected
	Evidence of Fishing Activity	None detected
	Anthropogenic Debris	None detected
	Complex Habitat (NMFS 2020)	None detected
	Field of View	1,593 cm ²

Table 3-33. Visual characterization of still image associated with Station GB32.

		Characteristic	Description
General Characterization: Light-colored sand with sand ripples (a few cm) and suspended organic debris and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Two <5 cm demersal fish (on right side of image)	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,638 cm ²	

Table 3-34. Visual characterization of still image associated with Station GB33.


		Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and suspended organic debris and trace shell hash</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,576 cm ²

Table 3-35. Visual characterization of still image associated with Station GB34.

		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,723 cm ²	

Table 3-36. Visual characterization of still image associated with Station GB35.


		Characteristic	Description
General Characterization: Light-colored small sand waves with sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Sand waves	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse-moderate shell hash	
	Field of View	1,419 cm ²	

Table 3-37. Visual characterization of still image associated with Station GB36.


		Characteristic	Description
General Characterization: Light-colored small sand waves with sparse shell hash			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Sand waves
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,563 cm ²

Table 3-38. Visual characterization of still image associated with Station GB37.

		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and sparse shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size	
	Field of View	2,029 cm ²	

Table 3-39. Visual characterization of still image associated with Station GB38.


		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and sparse shell hash and rubble			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash	
	Field of View	1,890 cm ²	

Table 3-40. Visual characterization of still image associated with Station GB39.


		Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and suspended organic debris and trace shell hash</p> 		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,913 cm ²

Table 3-41. Visual characterization of still image associated with Station GB40.


		Characteristic	Description
General Characterization: Shell hash with light/brown colored sand/silt			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with moderate shell hash	
	Field of View	1,598 cm ²	

Table 3-42. Visual characterization of still image associated with Station GB41.


		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and suspended organic debris and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	2,074 cm ²	

Table 3-43. Visual characterization of still image associated with Station GB42.

		Characteristic	Description
General Characterization: Shell hash and gray/brown sand with slightly irregular relief (less than a few cm)			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat sand/Shell aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Sandy Gravel according to grain size, but appears to be sand with sparse shell hash and rubble	
	Field of View	1,526 cm ²	

Table 3-44. Visual characterization of still image associated with Station GB43.

		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and trace shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Some small demersal fish visible as bottom came into focus, Bushy plant-like organism in bottom right corner of image – percent cover of ~1%	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	None detected	
	Field of View	1,620 cm ²	

Table 3-45. Visual characterization of still image associated with Station GB44.


		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and moderate shell hash			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	Grab collected a nudibranch (likely <i>Pleurobranchaea tarda</i>) – percent cover of ~1%	
	Macroinvertebrate and Fish Habitat	Flat sand/Shell aggregate	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size, but appears to be sand with sparse shell hash and rubble	
	Field of View	1,461 cm ²	

Table 3-46. Visual characterization of still image associated with Station GB45.

		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and trace shell hash			
	Biotic Benthic Activity		None detected
	Epibenthic Macroinvertebrates and Fishes		5 cm demersal fish in center of screen
	Macroinvertebrate and Fish Habitat		Flat Sand
	Aquatic Vegetation		None detected
	Evidence of Fishing Activity		None detected
	Anthropogenic Debris		None detected
	Complex Habitat (NMFS 2020)		None detected
	Field of View		1,409 cm ²

Table 3-47. Visual characterization of still image associated with Station GB46.

		Characteristic	Description
General Characterization: Light-colored sand ripples and trace shell hash			
		Biotic Benthic Activity	None detected
		Epibenthic Macroinvertebrates and Fishes	None detected
		Macroinvertebrate and Fish Habitat	Flat Sand
		Aquatic Vegetation	None detected
		Evidence of Fishing Activity	None detected
		Anthropogenic Debris	None detected
		Complex Habitat (NMFS 2020)	None detected
		Field of View	1,609 cm ²

Table 3-48. Visual characterization of still image associated with Station GB47.

	Characteristic	Description
<p>General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and suspended organic debris and trace shell hash</p>		
	Biotic Benthic Activity	None detected
	Epibenthic Macroinvertebrates and Fishes	None detected
	Macroinvertebrate and Fish Habitat	Flat Sand
	Aquatic Vegetation	None detected
	Evidence of Fishing Activity	None detected
	Anthropogenic Debris	None detected
	Complex Habitat (NMFS 2020)	None detected
	Field of View	1,489 cm ²

Table 3-49. Visual characterization of still image associated with Station GB48.



		Characteristic	Description
General Characterization: Light-colored sand with slightly irregular relief (less than a few cm) and sparse shell hash			
	Biotic Benthic Activity		None detected
	Epibenthic Macroinvertebrates and Fishes		None detected
	Macroinvertebrate and Fish Habitat		Flat Sand
	Aquatic Vegetation		None detected
	Evidence of Fishing Activity		None detected
	Anthropogenic Debris		None detected
	Complex Habitat (NMFS 2020)		Yes – Gravelly Sand according to grain size
	Field of View		1,568 cm ²

Table 3-50. Visual characterization of still image associated with Station GB49.

		Characteristic	Description
General Characterization: Shell hash and rubble with gray/brown-colored sand			
	Biotic Benthic Activity	None detected	
	Epibenthic Macroinvertebrates and Fishes	None detected	
	Macroinvertebrate and Fish Habitat	Flat Sand	
	Aquatic Vegetation	None detected	
	Evidence of Fishing Activity	None detected	
	Anthropogenic Debris	None detected	
	Complex Habitat (NMFS 2020)	Yes – Gravelly Sand according to grain size	
	Field of View	1,862 cm ²	

3.2 Sediment Analysis

The following section presents grain size composition, moisture content, and concentration of TOC (Table 3-51 and Figure 3-2), which were provided from the TestAmerica analyses. Samples were generally sandy with an average of 92.6% sand. Silt/sand made up an average of 2.5% of samples by weight with a maximum of 12.6% at grab station GB29. Gravel constituted an average of 4.8% of samples and ranged between 0.0 and 50.0% of samples. Based on visual analysis, shell debris (i.e., shell hash and rubble) from multiple species including Atlantic surf clams (*Spisula solidissima*), Atlantic jackknife clams (*Ensis leei*), and blue mussels (*Mytilus edulis*) was present in many samples with densities ranging from trace to dense and accounted for most of the gravel-sized grain components reported in the much of the grain size results. Grab stations GB02, GB08, GB09, GB10, GB11, GB14, GB26, GB27, GB28, and GB35 contained visually confirmed gravel substrate of geologic origin. Organic carbon content was generally low in all samples with 24 of the 49 samples containing levels of TOC below the reporting limit of 2,000 mg/kg and a maximum reported content of 83,000 mg/kg at station GB42. Higher TOC was generally observed in grabs with more shell debris.

Table 3-51. Grain size composition, moisture content, and total organic carbon content of grab samples.

Station	> 4.75 mm (%)	2 – 4.75 mm (%)	0.425 – 2 mm (%)	0.075 – 0.425 mm (%)	< 0.075 mm (%)	Moisture Content (%)	Solids Content (%)	Total Organic Carbon (mg/kg)
GB01	0.0	0.1	0.7	96.6	2.7	24.3	75.7	ND
GB02	2.8	10.5	66.4	18.7	1.6	16.0	84.0	3,100
GB03	5.0	1.8	54.4	37.2	1.6	16.6	83.4	13,000
GB04	0.0	1.6	59.1	36.9	2.4	16.7	83.3	ND
GB05	2.6	3.6	47.2	44.9	1.8	19.3	80.7	ND
GB06	9.3	8.2	57.0	23.2	2.3	13.7	86.3	2,700
GB07	2.2	5.7	46.8	43.6	1.6	16.9	83.1	3,000
GB08	24.2	27.7	38.5	7.4	2.2	17.1	82.9	28,000
GB09	10.5	31.7	45.4	9.3	3.1	10.4	89.6	20,000
GB10	4.2	13.6	63.2	15.9	3.1	19.7	80.3	14,000
GB11	2.0	7.0	52.2	36.1	2.5	24.3	75.7	32,000
GB12	0.0	0.0	0.1	96.0	3.8	25.9	74.1	ND
GB13	0.0	0.7	10.9	86.6	1.7	22.7	77.3	ND
GB14	13.7	14.2	51.5	18.2	2.3	21.6	78.4	25,000
GB15	0.0	0.0	0.5	97.1	2.4	24.4	75.6	ND
GB16	0.0	0.2	0.8	96.3	2.6	26.9	73.1	ND
GB17	0.0	0.0	0.3	96.9	2.7	24.6	75.4	ND
GB18	0.3	0.8	49.5	46.9	2.5	18.5	81.5	ND
GB19	0.2	0.5	10.8	86.7	1.7	21.5	78.5	ND

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Station	> 4.75 mm (%)	2 – 4.75 mm (%)	0.425 – 2 mm (%)	0.075 – 0.425 mm (%)	< 0.075 mm (%)	Moisture Content (%)	Solids Content (%)	Total Organic Carbon (mg/kg)
GB20	0.0	0.0	0.6	97.2	2.1	26.6	73.4	ND
GB21	0.0	0.0	0.1	95.9	4.0	29.3	70.7	2,200
GB22	5.1	3.3	11.1	78.3	2.3	27.8	72.2	ND
GB23	0.0	0.2	4.2	93.8	1.8	24.8	75.2	3,200
GB24	0.3	0.2	1.5	97.1	0.9	24.0	76.0	ND
GB25	0.0	0.9	3.8	92.6	2.7	26.7	73.3	ND
GB26	50.0	9.4	9.8	29.1	1.7	16.6	83.4	38,000
GB27	22.2	23.1	44.1	5.9	4.6	11.2	88.8	19,000
GB28	7.3	4.6	33.6	52.7	1.8	22.4	77.6	2,200
GB29	0.0	0.0	0.2	87.2	12.6	43.5	56.5	5,200
GB30	0.0	0.0	0.4	94.9	4.7	24.2	75.8	ND
GB31	0.0	0.3	2.8	94.9	2.0	24.9	75.1	ND
GB32	0.0	0.0	0.2	96.9	2.9	21.7	78.3	ND
GB33	0.0	0.0	0.5	97.8	1.8	21.3	78.7	ND
GB34	0.8	0.5	0.7	95.2	2.7	25.4	74.6	ND
GB35	1.5	6.0	61.8	29.0	1.8	17.0	83.0	5,200
GB36	0.3	0.8	58.7	38.5	1.7	22.6	77.4	ND
GB37	10.9	13.7	57.1	16.8	1.5	18.3	81.7	15,000
GB38	3.8	4.0	68.8	21.8	1.7	22.6	77.4	5,400
GB39	0.2	0.7	5.0	92.3	1.7	22.1	77.9	ND
GB40	10.6	8.6	26.5	51.8	2.5	22.0	78.0	28,000
GB41	0.0	0.1	2.4	95.7	1.7	23.6	76.4	ND
GB42	16.1	10.2	45.6	25.3	2.8	25.5	74.5	83,000
GB43	2.7	1.0	1.8	92.7	1.8	12.6	87.4	3,100
GB44	8.2	5.3	62.1	21.9	2.5	20.8	79.2	16,000
GB45	0.0	0.3	22.9	75.0	1.7	21.3	78.7	ND
GB46	0.0	0.6	18.5	78.0	2.9	23.4	76.6	2,000
GB47	0.0	0.1	0.9	96.6	2.4	25.1	74.9	ND
GB48	9.3	8.7	61.2	19.2	1.7	17.8	82.2	12,000
GB49	10.0	12.1	49.5	25.8	2.7	16.9	83.1	27,000

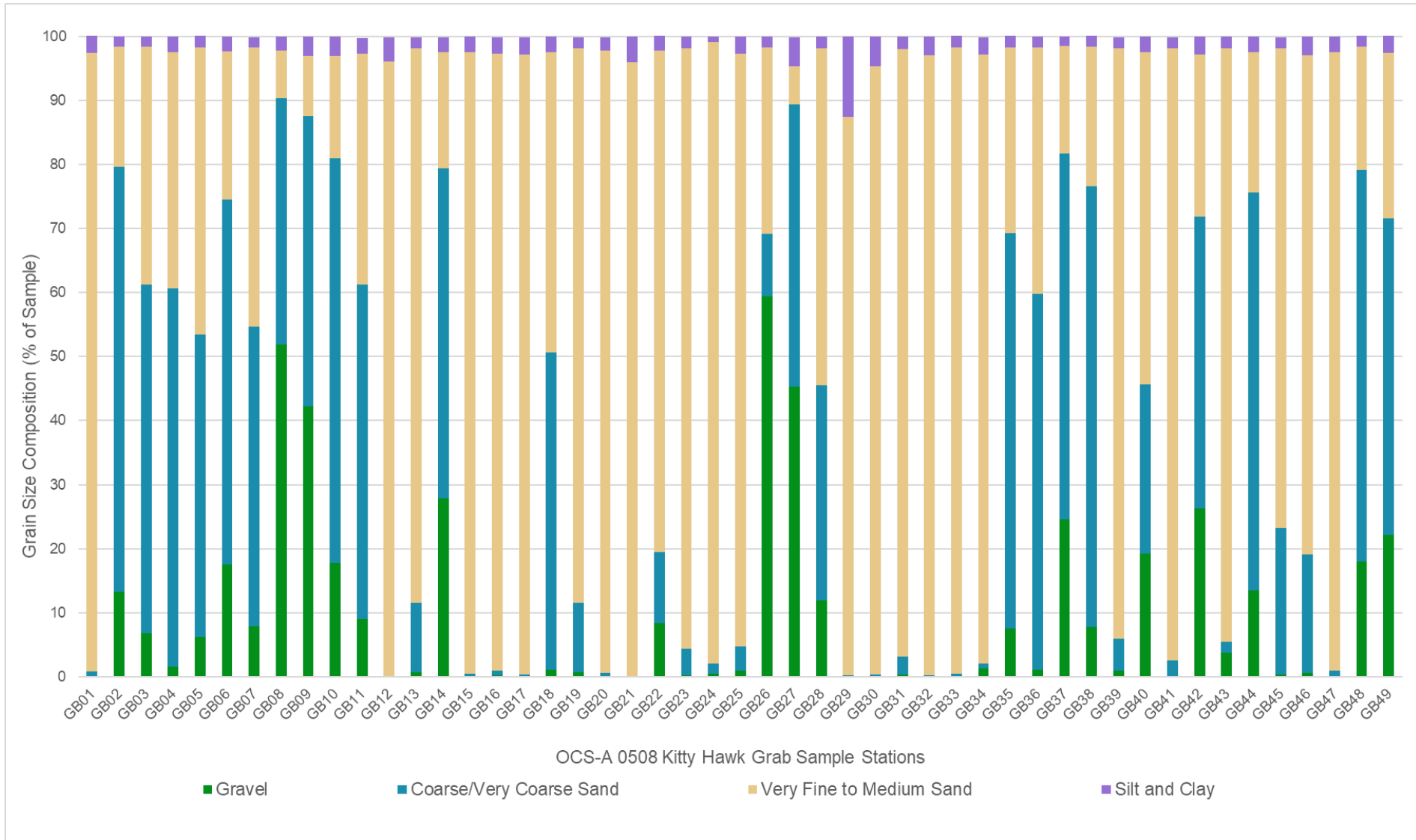


Figure 3-2. Grain size composition at each sample station.

3.3 Benthic Community Analysis

3.3.1 Taxonomic Composition

Grab samples were processed and analyzed for benthic macroinvertebrate communities from all stations except for station GB15 (invertebrate sample was deemed biased after large wave disrupted sieving). The 48 benthic grab samples collected in this survey yielded a total of 6,447 individual benthic macrofaunal organisms from 11 unique phyla and 109 families (or next lowest LPTL; Table 3-52). The phyla Annelida and Arthropoda dominated the samples in both abundance and number unique of taxa, representing 70.0% of all organisms and 67.9% of all unique taxa (Figure 3-3).

Table 3-52. Phyla composition of all 48 benthic grab samples combined.

Phyla	Abundant Taxonomic Groups (common names)	Abundance ¹	Number of LPTL
Annelida	Polychaete worms, Oligochaete worms	2,665	103
Arthropoda	Amphipods, Isopods, Tanaids, Decapods	1,845	52
Nematoda	Nematodes	782	1
Mollusca	Bivalves (clams, etc.), Gastropods (snails and slugs)	584	46
Echinodermata	Sand dollars, Brittle stars	398	4
Chordata	Lancelets, sea squirts	89	2
Nemertea	Ribbon or proboscis worms	60	12
Ectoprocta	Bryozoans	17	4
Cnidaria	Hydrozoa, sea anemones	5	2
Brachiopoda	“Lamp shells”	1	1
Foraminifera	Forams	1	1
Total		6,447	228

¹ Abundance reported as count in all 48 0.05 m² grab samples

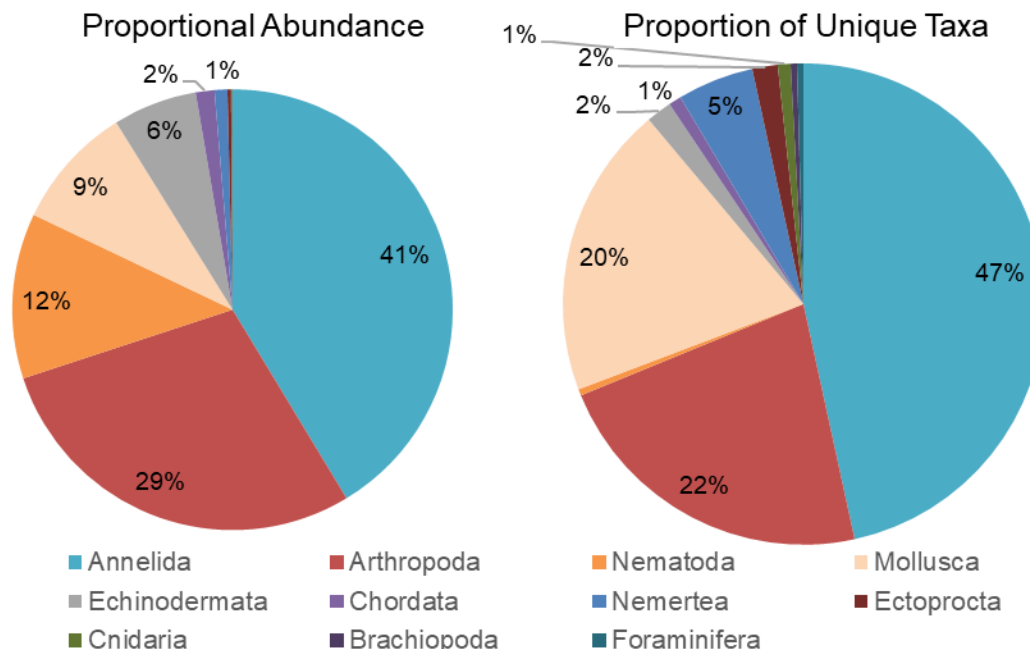


Figure 3-3. Abundance and number of unique taxa (species or LPTL) for each phylum collected in all benthic grab samples. Results presented as percentage of total.

Density across the 48 benthic grab stations ranged from 6 organisms at Station GB26 to 453 at Station GB27, with a mean density of 134 organisms per station across all stations (Table 3-53, Appendix B). Nematoda was the most abundant LPTL with 782 individuals identified to phyla level, while *Byblis serrata*, an amphipod species, was the most abundant LPTL identified to below Phyla level with 608 total individuals (Table 3-54). The most common LPTLs according to frequency of occurrence were Echinoidea (33 samples), *Rhepoxynius epistomus* (an amphipod, 32 samples), Nematoda (31 samples), and Ostracoda (30 samples). Observed species of direct commercial or recreational importance included Atlantic rock crab (*Cancer irroratus*), Atlantic jackknife clam (*Ensis leei*), scallop family (Pectinidae), ocean quahog (*Arctica islandica*), Atlantic surf clam (*Spisula solidissima*), lady crab (*Ovalipes ocellatus*). Sample stations with living bivalve species of commercial importance are presented in Figure 3-4. Note that most of the observed bivalves of commercial importance were very young (i.e. recently post-larval) life stages, with relatively high probability of mortality before reaching harvestable size. The full list of observed taxa is presented in Table 3-54 with multiple taxa were listed in the same row if they shared a mean density value.

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Table 3-53. Abundance of each Phylum counted within each grab sample with total abundance for each grab and phyla.

Station	Annelida	Arthropoda	Brachiopoda	Chordata	Cnidaria	Echinodermata	Ectoprocta	Foraminifera	Mollusca	Nemato-da	Nemertea	Total Abundance
GB01	12	44		2		2			29			89
GB02	110	64		3					14	12	4	207
GB03	21	4				6			10	16	2	59
GB04	26	25		8		8			4	6	1	78
GB05	5	5							1			11
GB06	28	30		1						4	4	67
GB07	9	12				1			1	3	1	27
GB08	71	25		2		2			6	83	2	191
GB09	81	21		4					6	58	2	172
GB10	57	20		5	2	4			11	91	1	191
GB11	69	57				6			15	16		163
GB12	58	24	1	1		32		1	7	2		126
GB13	6	13				42			1			62
GB14	21	33		1		7			2	29	5	98
GB16	60	308				13			31		1	413
GB17	5	31			1	77	1		21			136
GB18	23	15		1		19				1		59
GB19	5	44				4			22			75
GB20	46	109					1		13	2	4	175
GB21	29	45		1		2			80	1	1	159
GB22	30	33		2		1			25		3	94
GB23	9	33				9			20	4		75
GB24	6	17				8			2			33
GB25	7	6				3			3		1	20
GB26		1							5			6
GB27	341	20		4					3	81	4	453
GB28	216	2					1		3	19	4	245
GB29	20	4							16			40
GB30	105	5							11	1		122
GB31	8	122				1			6			137
GB32	22	135							25	1		183
GB33	5	63				1			18		1	88
GB34	40	7			1	6			28			82
GB35	173	4		24					4	102	6	313
GB36	336	17		8					10	37	2	410
GB37	15	14		4		2			2	10	1	48
GB38	123	20		4		29	3		9	23	1	212
GB39	10	15				4			3		1	33
GB40	39	32				7			7			85
GB41	4	55				9	1		4	1		74
GB42	93	40		4			3		9	75	1	225
GB43	1	24			1	1			2	2		31
GB44	22	10		3		18	2		19	34	2	110
GB45	3	29		1		10			22	1		66
GB46	18	77				3			12	4		114
GB47	37	88				31			23			179
GB48	49	30		4		22			15	61	5	186
GB49	191	13		2		8	5		4	2		225
Total	2665	1845	1	89	5	398	17	1	584	782	60	6,447

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Figure 3-4. Presence of living bivalves of commercial importance.

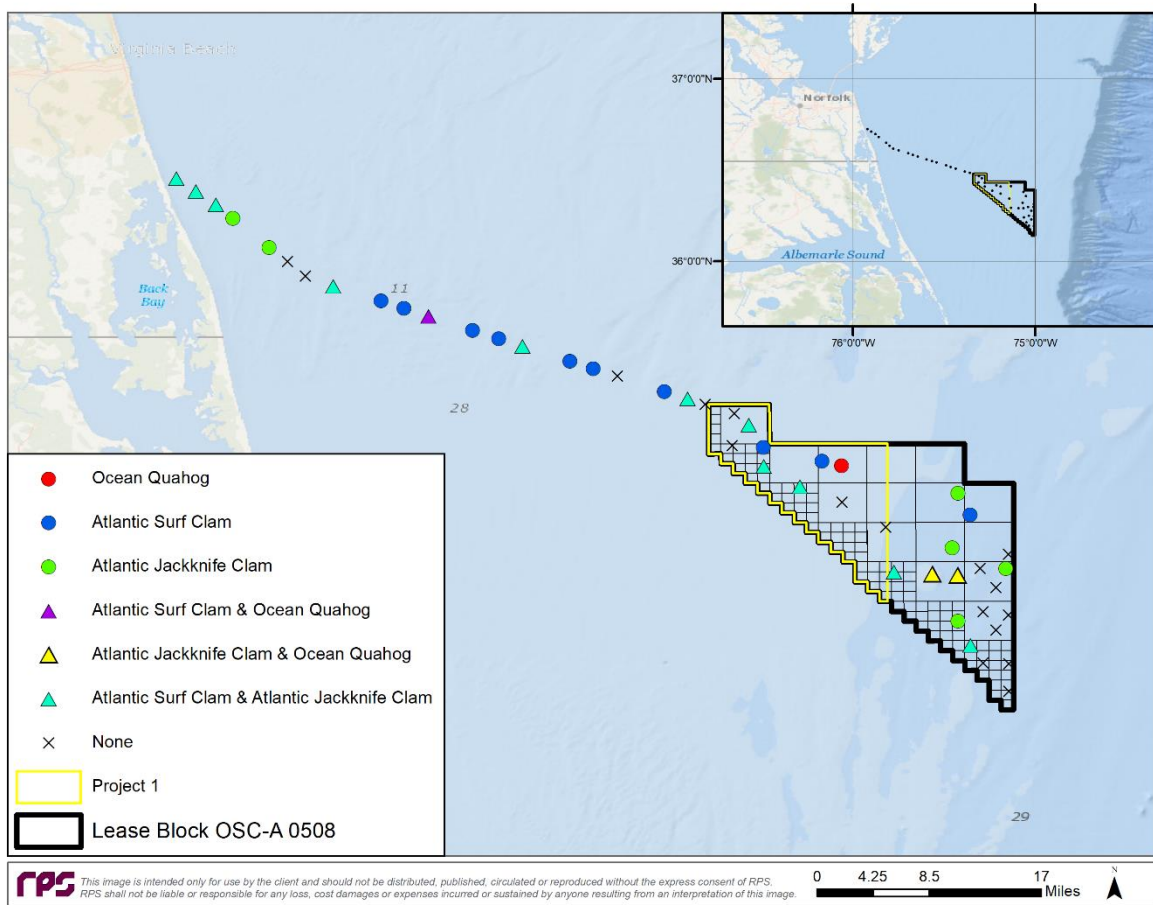


Table 3-54. Mean density of each phyla and taxa (species or LPTL) collected across the 48 grab stations.

Phyla	Taxa (LPTL)	Mean Density (# / 0.05 m ²)
Annelida	Oligochaeta	8.1
	Aricidea (Acmira catherinae)	5.8
	Polygordius jouinae	5.6
	Cirratulidae	3.7
	Parapionosyllis longicirrata	3.1
	Prionospio sp.	2.4
	Eusyllis lamelligera, Scalibregma inflatum	1.7
	Aricidea (Aricidea wassi, Lumbrineris tenuis)	1.6
	Protodorvillea kefersteini	1.5
	Aricidea (Acmira cerrutii, Lumbrineris fragilis)	1.1
	Caulleriella venefica, Hemipodia simplex	1
	Polycirrus eximius	0.9
	Goniadella gracilis, Mediomastus ambiseta, Nephtyidae, Nephtys picta, Onuphis eremita	0.6
	Eumida sanguinea, Lumbrinerides acuta, Spiophanes bombyx Complex	0.5

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Phyla	Taxa (LPTL)	Mean Density (# / 0.05 m ²)
	Aphelochaeta marioni, Clymenella zonalis, Prionospio pygmaeus, Scoloplos acmeceps, Spio filicornis, Tharyx sp. A sensu MWRA 2007, Trivisia parva	0.4
	Clymenella mucosa, Onuphidae, Sphaerosyllis taylori	0.3
	Armandia maculata, Exogone dispar, Hesionura elongata, Kirkegaardia baptisteeae, Maldanidae, Marphysa bellii, Notomastus sp., Paradoneis lyra, Pettiboneia duofurca, Pisione remota, Sthenelais limicola, Streptosyllis websteri	0.2
	Aglaophamus verrilli, Ampharete oculata, Cirrophorus furcatus, Dipolydora socialis, Drilonereis longa, Glycera americana, Kirkegaardia cf. dorsobranchialis, Leitoscoloplos fragilis, Microphthalmus sp., Notomastus hemipodus, Ophelia bicornis, Orbiniidae, Owenia fusiformis, Paraonis fulgens, Paraonis pygoenigmatica, Phyllodoce mucosa, Phyllofelia, Phyllofelia sp., Polycirrus sp., Scoletoma tenuis, Scoletoma verrilli, Syllidae, Tharyx acutus	0.1
	Aglaophamus circinata, Ampharete finmarchica, Arabella iricolor, Brania wellfleetensis, Clymenella torquata, Diopatra cuprea, Exogone hebes, Glycera capitata, Harmothoe extenuata, Harmothoe imbricata, Leitoscoloplos sp., Loimia medusa, Magelona papillicornis, Mediomastus sp., Microspio pigmentata, Nephtys sp., Notomastus latericeus, Orbinia sp., Paleanotus heteroseta, Paraonidae, Paraprionospio pinnata, Parougia caeca, Piscicolidae, Polydora cornuta, Prionospio perkinsi, Prionospio steenstrupi, Scolelepis (Parascolelepis texana), Scoloplos rubra, Sigalion arenicola, Sigambra tentaculata, Sphaerodoropsis corrugata, Spiochaetopterus oculatus, Streptosyllis arenae, Syllides fulvus, Terebellidae	<0.1
	Mean Annelida	55.5
	Byblis serrata	12.7
	Rhepoxynius epistomus	5.1
	Ostracoda	4.1
	Rhepoxynius hudsoni	2.9
	Liljeborgia sp.	2.4
	Unciola serrata	1.9
	Ampelisca verrilli, Protohaustorius deichmannae, Protohaustorius wigleyi, Rhepoxynius sp.	0.9
	Tanaissus psammophilus	0.8
Arthropoda	Acanthohaustorius millsii, Americhelidium americanum	0.5
	Jassa marmorata	0.4
	Ampelisca vadorum, Bathyporeia parkeri, Maeridae	0.3
	Apocorophium simile, Edotea triloba, Idunella barnardi, Pagurus arcuatus, Ptilanthura tenuis	0.2
	Batea catharinensis, Chiridotea tuftsii, Cyathura burbanki, Cyclaspis varians, Harpacticoida, Microprotopus raneyi, Oxyurostylis smithi, Paguridae, Pagurus politus, Pagurus sp., Phoxocephalus holbolli, Tiron spiniferus, Unciola irrorata	0.1
	Acanthohaustorius sp., Amakusanthura magnifica, Ampelisca sp., Argissa hamatipes, Cancer irroratus, Cyclaspis pustulata, Gammaropsis cf. nitida, Hutchinsoniella macracantha, Mysidae, Ogyrides alphaerostris, Ovalipes ocellatus, Panopeidae, Parahaustorius holmesi, Pinnixa lunzi, Politolana polita, Processa hemphilli, Unciola sp.	<0.1
	Mean Arthropoda	38.4
Nematoda	Nematoda (LPTL)	16.3
	Mean Nematoda	16.3
	Solenioidea	2.2
	Spisula solidissima	2.0
	Pandora sp.	1.2
Mollusca	Ensis leei	0.9
	Nucula proxima	0.8
	Bivalvia, Trivia trivittata	0.7
	Mactridae, Periploma sp.	0.3

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Phyla	Taxa (LPTL)	Mean Density (# / 0.05 m ²)
	Solenioidea, Spisula solidissima, Pandora sp.ensis leei, Nucula proximaBivalvia, Tritia trivittata, Mactridae, Periploma sp.Angulus versicolor, Arctica islandicaEratoidea hematita, MytilidaePectinidae, Tellinidae, Turbonilla sp.	0.2
	Caecum johnsoniCotonopsis lafresnayi, Crassinella lunulataCyclocardia borealis, Cylichnella bidentataDiplodonta punctata, Diplodonta sp.Ervilia concentrica, Mysella planulataParvanachis obesa, Prunum roscidum, Veneridae	0.1
	Angulus tenellus, Astarte castanea, Astarte sp., Cardiidae, Cephalaspidea, Crenella decussata, Crepidula planaCrepidula sp., Cryoturris cerinellaLunarca ovalis, Macoma balthicaMarginellidae, Mercenaria sp.Neverita duplicata, Parvilucina crenellaPitar morrhuanus, Pleurobranchaea tarda, Pyrunculus caelatus	<0.1
Mean Mollusca		12.2
Echinodermata	Echinoidea	8.1
	Amphiuridae	0.1
	Asteroidea, Echinarachnius parma	<0.1
Mean Echinodermata		8.3
Chordata	Branchiostoma virginiae	1.5
	Ascidiacea	0.4
Mean Chordata		1.9
Nemertea	Nemertea	0.5
	Tubulanidae	0.2
	Nematoda, NemerteaTubulanidae, Carinomella lacteaCephalothricidae, Kirsteueriella biocellatusLineidae, Micrura sp., Tubulanus pellucidus	0.1
	Amphiporus ochraceusAmphiporus sp., Cerebratulus sp., Tetrastemma sp.	<0.1
Mean Nemertea		1.3
Ectoprocta	Reussirella doma	0.2
	Cribrilina macropunctata	0.1
	Electra monostachys, Biflustra tenuis	<0.1
Mean Ectoprocta		0.4
Cnidaria	Hydrozoa	0.1
	Actiniaria	<0.1
Mean Cnidaria		0.1
Brachiopoda	Glottidia pyramidata	<0.1
Mean Brachiopoda		<0.1
Foraminifera	Astrorhiza sp.	<0.1
Mean Foraminifera		<0.1

3.3.2 Richness, Diversity, and Evenness

Taxonomic richness ranged from 0.6 at station GB26 to 7.0 at station GB10 with a mean richness of 4.3 (Table 3-55 and Figure 3-5). Station GB26 also exhibited the lowest diversity (0.5), well below the mean of 2.2, while station GB22 had the highest diversity (2.9). Evenness ranged from 0.4 at station GB30 to 1.0 at stations GB05 and GB39 with a mean evenness of 0.7.

Table 3-55. Community composition parameters calculated for each grab sample station.

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Station	Abundance (# of individuals per 0.5 m ²)	# of LPTLs	Ecological Indices		
			Richness	Diversity	Evenness
GB01	89	29	6.0	2.9	0.9
GB02	202	39	6.0	2.7	0.8
GB03	59	21	4.7	2.6	0.9
GB04	79	28	6.0	2.8	0.8
GB05	11	9	3.3	2.1	1.0
GB06	67	22	4.3	2.7	0.9
GB07	27	12	3.3	2.1	0.8
GB08	191	31	5.1	2.3	0.7
GB09	172	40	6.4	2.6	0.7
GB10	183	45	7.0	2.4	0.7
GB11	165	34	5.5	2.7	0.8
GB12	126	31	5.6	2.6	0.8
GB13	62	14	2.7	1.3	0.5
GB14	98	27	5.2	2.4	0.8
GB16	413	35	4.3	1.9	0.6
GB17	136	24	4.5	1.9	0.6
GB18	59	20	3.9	2.3	0.8
GB19	75	20	3.5	2.2	0.8
GB20	175	24	3.9	1.9	0.6
GB21	159	31	5.3	2.3	0.7
GB22	97	30	5.9	2.9	0.9
GB23	77	19	3.9	2.5	0.9
GB24	33	14	3.1	2.1	0.9
GB25	20	12	3.7	2.3	0.9
GB26	6	2	0.6	0.5	0.7
GB27	453	37	4.3	2.3	0.7
GB28	245	29	3.3	2.1	0.7
GB29	40	19	3.8	2.4	0.9
GB30	122	19	2.7	1.1	0.4
GB31	137	17	2.6	1.3	0.5
GB32	183	25	4.2	1.9	0.6
GB33	88	18	2.7	2.0	0.8
GB34	82	26	4.5	2.5	0.8
GB35	313	35	4.2	2.3	0.7
GB36	410	28	3.3	2.0	0.7
GB37	48	22	4.4	2.4	0.8
GB38	212	39	6.0	2.7	0.8
GB39	33	18	4.0	2.6	1.0
GB40	85	24	4.3	2.7	0.9
GB41	74	19	3.7	2.0	0.7
GB42	225	22	3.9	1.9	0.6

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Station	Abundance (# of individuals per 0.5 m ²)	# of LPTLs	Ecological Indices		
			Richness	Diversity	Evenness
GB43	31	13	2.6	2.0	0.9
GB44	110	32	6.4	2.7	0.8
GB45	66	20	4.3	2.6	0.9
GB46	114	23	4.4	2.0	0.6
GB47	179	31	4.6	2.4	0.7
GB48	186	30	5.0	2.5	0.8
GB49	225	25	3.7	1.4	0.5

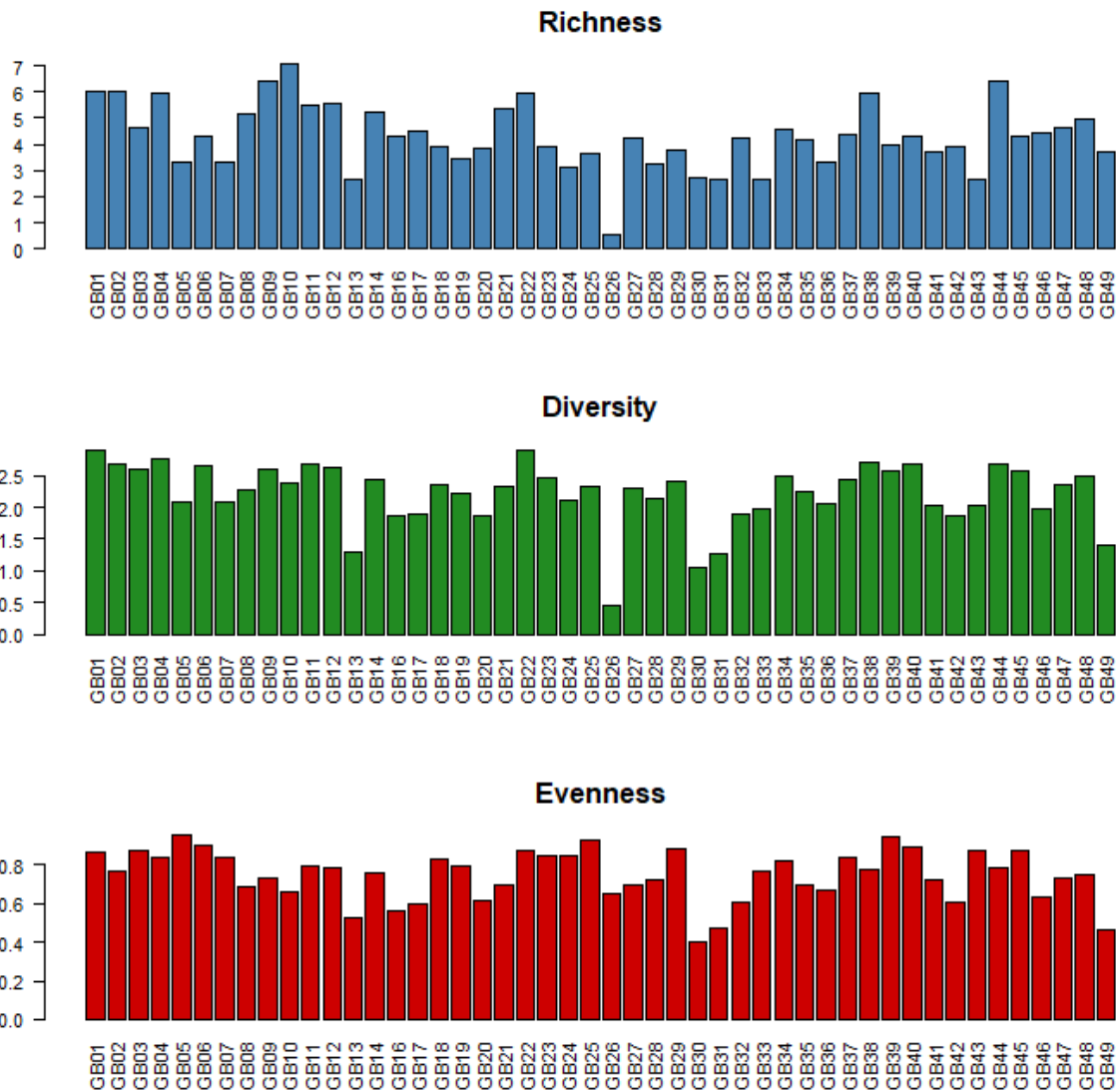


Figure 3-5. Ecological index values calculated for each sample station.

3.4 CMECS Classifications

3.4.1 Substrate Component







CMECS substrate classifications of each grab sample were assigned based on two variations of CMECS. One variation was the full CMECS classification as described in FGDC (2012) and the other variation was the NMFS modified CMECS (2020). The FGDC classification is more detailed and was based on visual observations of the grab samples as they were collected and after they were brought aboard in addition to the grain size composition from the sediment analysis (Section 3.2). In contrast, the NMFS modified CMECS classifications were based solely on the physical grain size composition unless it appeared that the substrate was more than 50% shell debris. Both classifications are provided because NMFS (2020) recommendations suggest the use of their CMECS variation for habitat mapping, whereas BOEM may require the more in-depth classifications for the sake of assessing benthic resources and monitoring impacts. In addition, it is apparent from visual analysis of samples that many samples with gravel-sized components according to physical grain size analysis alone (i.e., without looking at the contents of the grab) are composed of sand-substrates of geologic origin with the gravel-sized components only or mostly composed of shell debris of biogenic origin. This is important because the presence of gravel substrate dictates the resolution of acoustic imaging for the sake of habitat mapping. Results are presented as image captions Table 3-56; as a color-coded map (Figure 3-6); as hierarchies in Table 3-57; and as geolocated sites (Table A - 1).

When classified using the NMFS modified (2020) CMECS, the most common habitat type was fine/very fine sand (23 grabs) followed by gravelly sand (17 grabs). The remaining 9 samples were sandy gravel (6 grabs), very coarse/coarse sand (3 grabs), and muddy sand (1 grab).






When classified using the FGDC (2012) CMECS, the most common habitat type was finer sand with trace shell hash (17 grabs). Note that the category “finer sand” is a modifier we created that composed very fine, fine, and medium sand. In addition, “coarser sand” was a modifier that composed coarse and very coarse sand. Overall, fewer samples were classified as gravel than the NMFS variation because shells appeared to comprise the gravel component and ranged from trace to moderate presence in all but 2 grabs.

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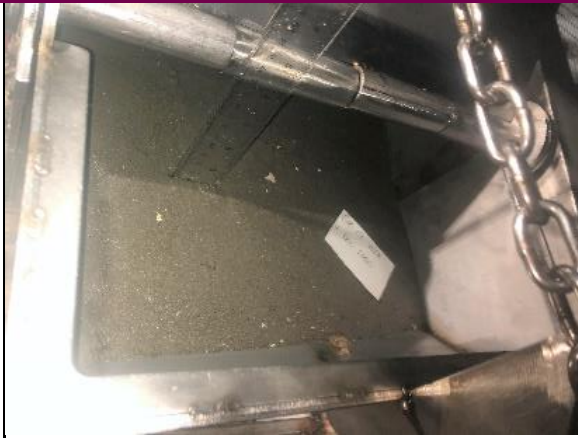

Table 3-56. Images of grab samples immediately after recovery and draining, along with both NMFS (2020) Modified CMECS and FGDC (2012) CMECS substrate classifications.

Station	Image and Description	Image and Description
1-2	 <p data-bbox="272 751 695 821"> NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash </p>	 <p data-bbox="846 751 1312 821"> NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash </p>
3-4	 <p data-bbox="272 1262 834 1331"> NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash </p>	 <p data-bbox="846 1262 1219 1331"> NMFS CMECS: very coarse/coarse sand CMECS: coarse sand with sparse shell hash </p>
5-6	 <p data-bbox="272 1772 834 1841"> NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash </p>	 <p data-bbox="846 1772 1341 1841"> NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with moderate shell hash </p>







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<p>7-8</p>	 <p>07 WEA</p>	 <p>08 WEA</p>
	<p>NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash</p>	<p>sandy gravel sandy gravel with moderate shell hash and sparse worm tubes</p>
<p>9-10</p>	 <p>09 WEA</p>	 <p>10 WEA</p>
	<p>NMFS CMECS: sandy gravel CMECS: gravelly sand with moderate shell hash</p>	<p>gravelly sand gravelly sand with sparse shell hash and sparse worm tubes</p>
<p>11-12</p>	 <p>11 WEA</p>	 <p>12 WEA</p>
	<p>NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash</p>	<p>fine/very fine sand fine sand with trace shell hash</p>







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13-14	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>gravelly sand slightly gravelly sand with moderate shell hash</p>
15-16	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>fine/very fine sand fine sand with trace shell hash</p>
17-18	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>very coarse/coarse sand coarse sand with trace shell hash</p>


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19-20	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>fine/very fine sand fine sand with trace shell hash</p>
21-22	 <p>NMFS CMECS: fine/very fine sand CMECS: very fine sand with trace shell hash</p>	 <p>gravelly sand slightly gravelly sand with sparse shell hash</p>
23-24	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>fine/very fine sand fine sand with trace shell hash</p>






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25-26	 <p data-bbox="272 625 846 695">NMFS CMECS: fine/very fine sand CMECS: fine sand with sparse shell hash</p>	 <p data-bbox="846 625 1443 695">sandy gravel sandy gravel with moderate shell cobble</p>
27-28	 <p data-bbox="272 1129 846 1199">NMFS CMECS: sandy gravel CMECS: gravelly sand with moderate shell hash</p>	 <p data-bbox="846 1129 1443 1199">gravelly sand slightly gravelly sand with moderate shell hash</p>
29-30	 <p data-bbox="272 1633 846 1709">NMFS CMECS: muddy sand CMECS: muddy sand</p>	 <p data-bbox="846 1633 1443 1709">fine/very fine sand very fine sand with trace shell hash</p>

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31-32		
	NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash	fine/very fine sand fine sand
33-34		
	NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash	fine/very fine sand fine sand with trace shell hash
35-36		
	NMFS CMECS: gravelly sand CMECS: slightly gravelly sand with sparse shell hash	fine/very fine sand slightly gravelly sand with sparse shell hash

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37-38	 <p>NMFS CMECS: gravelly sand CMECS: gravelly sand with sparse shell hash</p>	 <p>gravelly sand slightly gravelly sand with sparse shell hash</p>
39-40	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with sparse shell hash</p>	 <p>gravelly sand slightly gravelly sand with moderate shell hash</p>
41-42	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>gravelly sand slightly gravelly sand with moderate shell hash</p>

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43-44	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with sparse shell hash</p>	 <p>gravelly sand slightly gravelly sand with sparse shell hash and rubble</p>
45-46	 <p>NMFS CMECS: fine/very fine sand CMECS: medium sand with sparse shell hash</p>	 <p>fine/very fine sand medium sand with sparse shell hash</p>
47-48	 <p>NMFS CMECS: fine/very fine sand CMECS: fine sand with trace shell hash</p>	 <p>gravelly sand gravelly sand with sparse shell hash</p>

49



NMFS CMECS: gravelly sand

CMECS: gravelly sand with sparse shell hash

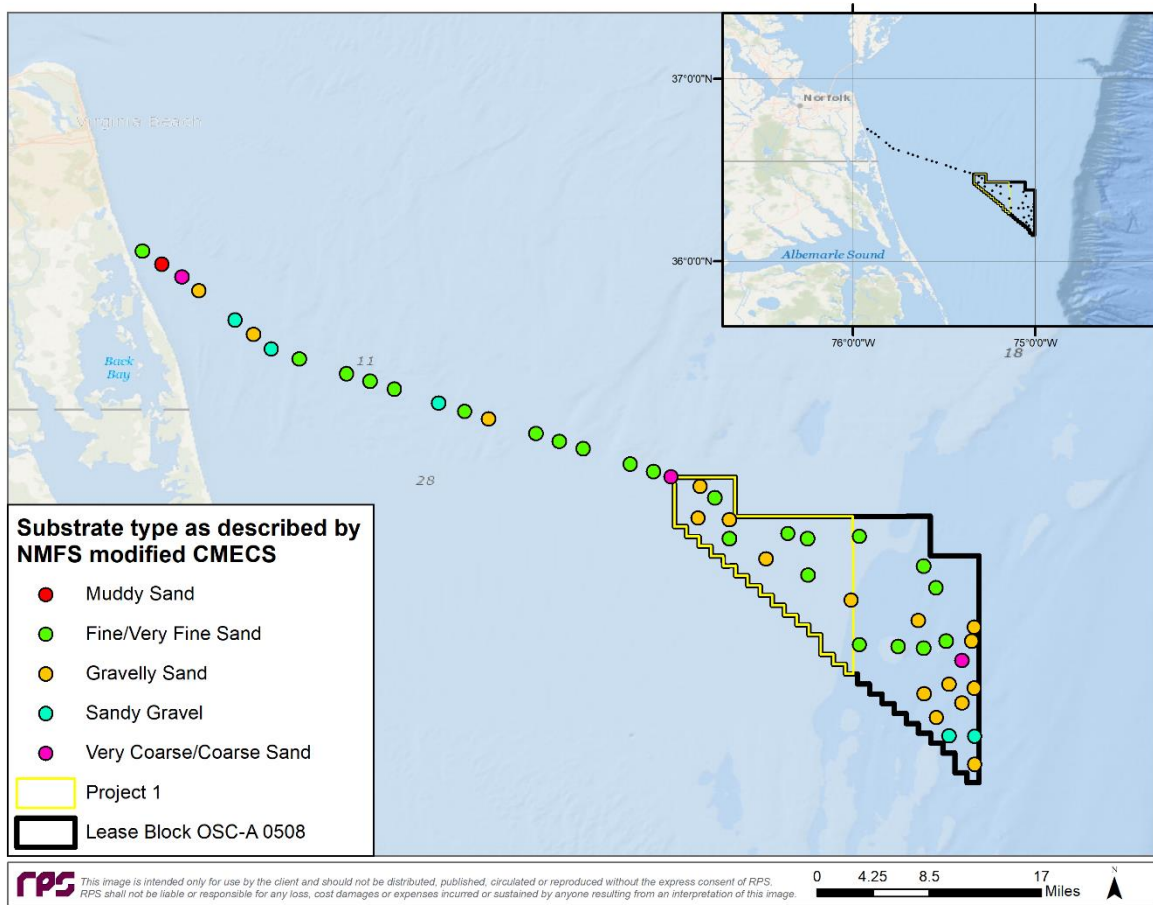


Figure 3-6. NMFS (2020) modified CMECS substrate classifications of grab sample station locations.

Table 3-57. NMFS (2020) modified CMECS hierarchical classification of substrates collected at each grab sample station.

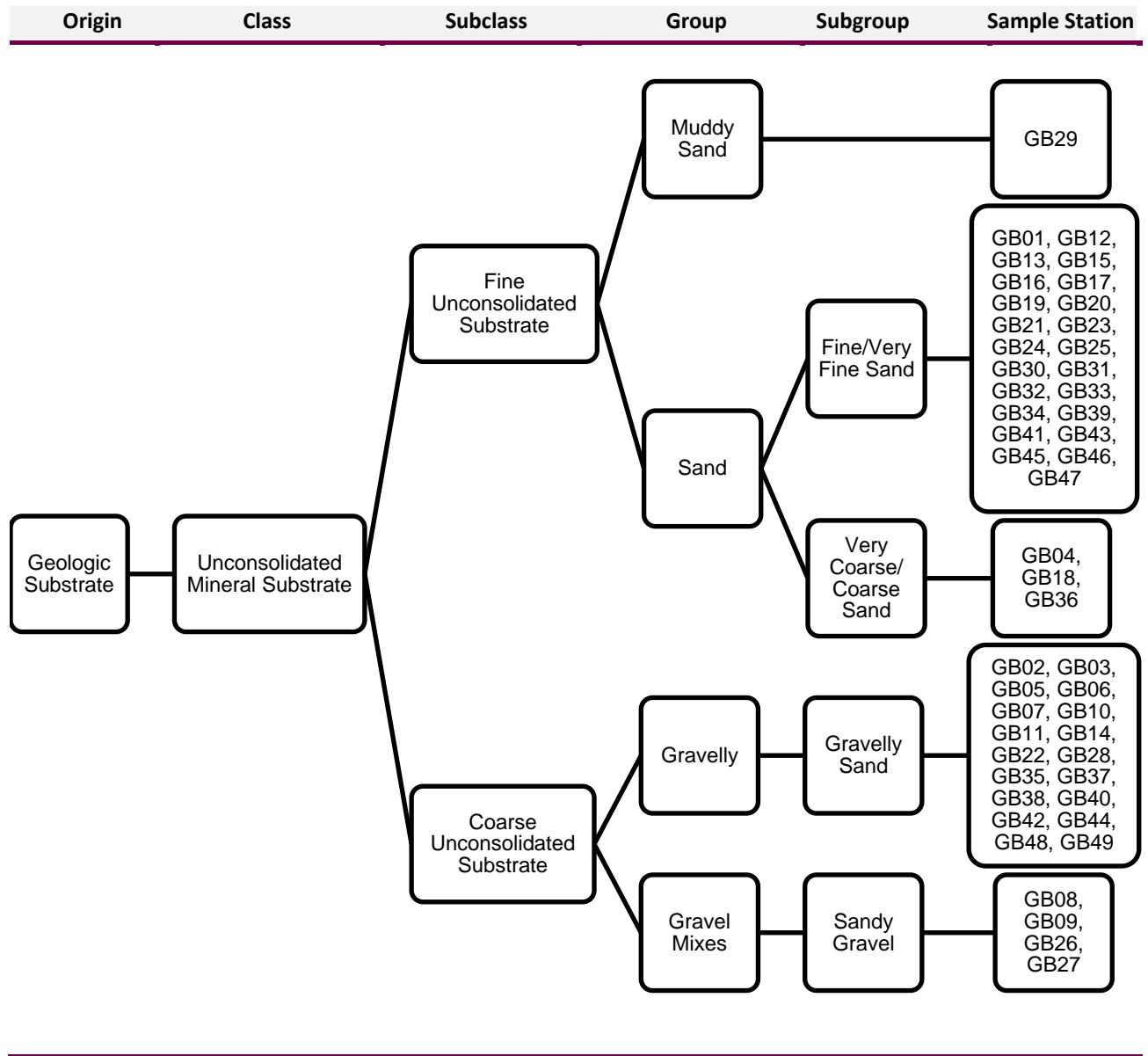
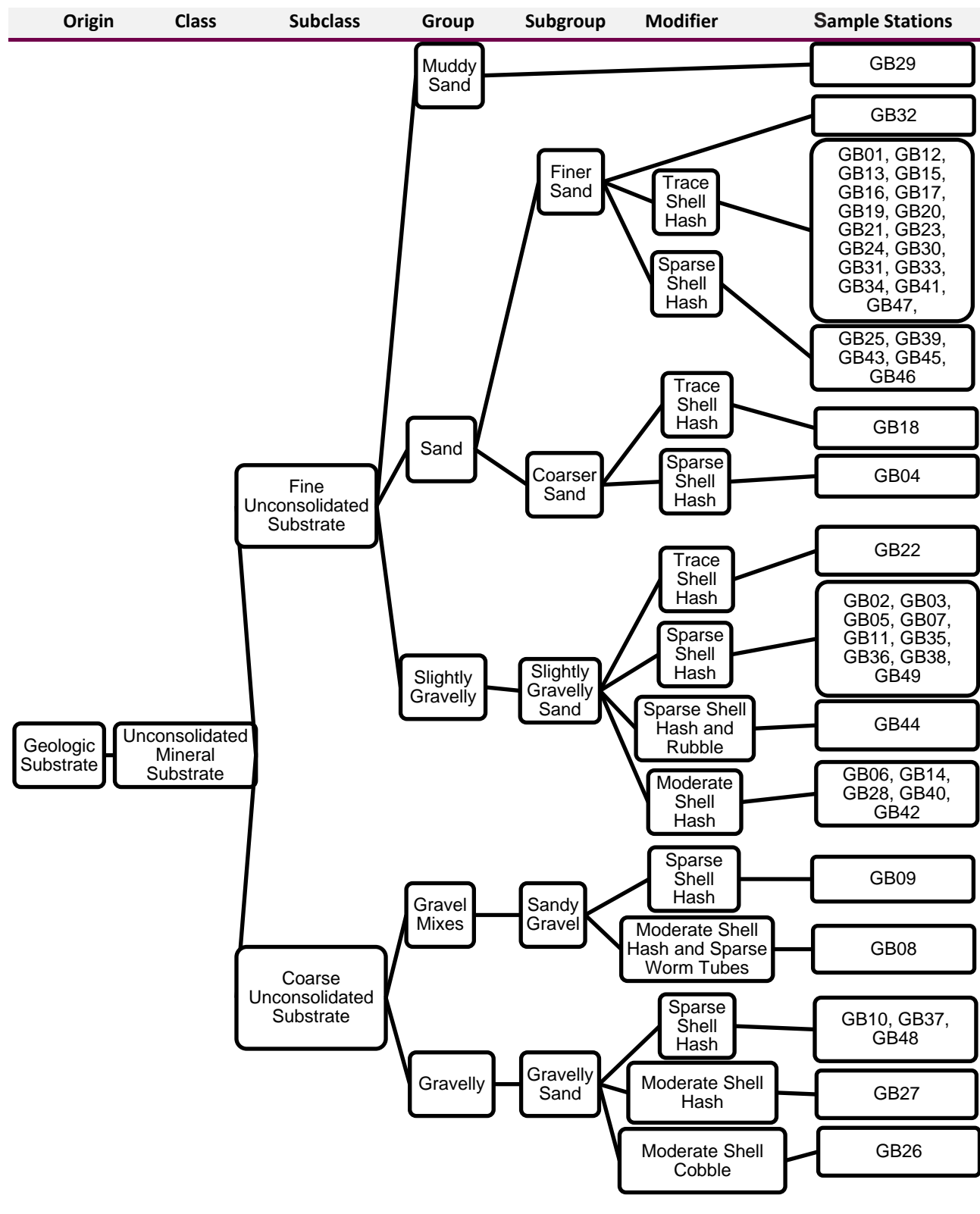


Table 3-58. FGDC (2012) CMECS hierarchical classification of substrates collected at each grab sample station. “Finer sand” includes very fine, fine and medium sand while “coarser sand” includes coarse and very coarse sand.



3.4.2 Biotic Component

The first and second most dominant taxa for each station was used to apply a FGDC (2012) CMECS biological component classification down to the group level with descriptive modifiers (Table 3-59). All samples consisted of soft sediment fauna, with most stations dominated by or containing small surface-burrowing fauna. The remaining stations were dominated by Echinoidea (sand dollars or urchins), bivalves, or mobile mollusks. Echinoidea were present in many of the samples, however, adult abundance was relatively low, with most samples containing early life stages that could not be identified below the level of class. Many of these early juveniles would be expected to die before reaching maturity under normal mortality rates so classifying habitats as Echinoidea beds (or in some cases clam beds under similar circumstances) is a little misleading because these individuals are potentially vagrant members of the population and may only dominate seasonally and in terms of abundance rather than biomass.

Table 3-59. CMECS hierarchical classification of the biotic component of the seabed and the dominant taxa as derived from the lab analysis at each station.

Biotic Setting	Class	Subclass	Group	Additional taxa	Sample Stations	
Benthic Biota	Faunal Bed	Soft Sediment Fauna	Small Surface-Burrowing Fauna	with Bivalves (clams)	GB01, GB23	
				with Small Tube Building Fauna	GB32	
				with Mobile Mollusks	GB29, GB34	
					GB02, GB05, GB06, GB07, GB08, GB09, GB10, GB11, GB14, GB16, GB20, GB22, GB27, GB28, GB30, GB31, GB33, GB35, GB36, GB37, GB40, GB41, GB42, GB43, GB46	
				with Echinoidea	GB03, GB04, GB24, GB25, GB38, GB39, GB44, GB47, GB48, GB49	
				Mobile Mollusks	GB26	
				Matricidae (clam) bed	with Small Surface-Burrowing Fauna	GB21
				Solenioidea (clam) bed	with Small Surface-Burrowing Fauna	GB19
				Echinoidea (urchin or sand dollar) bed	with Small Surface-Burrowing Fauna	GB12, GB13, GB17, GB18
					with Bivaves (clams)	GB45

3.5 Multivariate Analysis

The NMDS analysis and Bray-Curtis Similarity Index produced a stress value of 0.15, indicating a moderate fit. After color-coding sample stations based on NMFS (2020) modified CMECS classifications, sample stations formed apparent loose groupings corresponding to CMECS classifications with the most overlap between very coarse/coarse sand and a few other substrate components including sand gravel and gravelly sand (Figure 3-7).

The single station containing sandy mud (station GB29) was removed from SIMPER and ANOSIM results because it inherently contained no intragroup variability. Based on ANOSIM global test results, the null hypothesis that similarity of invertebrate assemblages between NMFS CMECS groups is greater than or equal to the similarity within NMFS CMECS groups was rejected (R value = 0.37 and significance level $p = 0.001$). In other words, there is evidence that the assemblages within samples are more similar to other samples within the same NMFS CMECS substrate component than to other substrate components. Although the model indicated significance, the within vs. between group relationships are only moderate in strength as indicated by the mid-range R value of 0.37. Therefore, NMFS CMECS grouping can only explain a portion of the variance of assemblages displayed between sites.

The SIMPER analysis provided pairwise insight as to which NMFS CMECS groups are more dissimilar to each other. According to the SIMPER results, sandy gravel and fine/very fine sand are the substrate component pair with the least similar invertebrate assemblages, largely because of differences in Nematoda, Ampeliscidae, and Oligochaeta abundances (Table 3-60). The remaining pairwise comparisons had dissimilarities of 73-84% with gravelly sand and very coarse/coarse sand containing the most similar assemblages. Nematode abundances tended to be one of the largest drivers of dissimilarity between pairs of CMECS substrate components.

To briefly summarize the multivariate results, it appears that the NMFS CMECS substrate component classifications are a reasonable grouping system for predicting what invertebrate assemblages may be present at a given station. However, some components, such as sandy gravel and very coarse/coarse sand, contain less dissimilar assemblages than other pairs of components based on the samples collected.

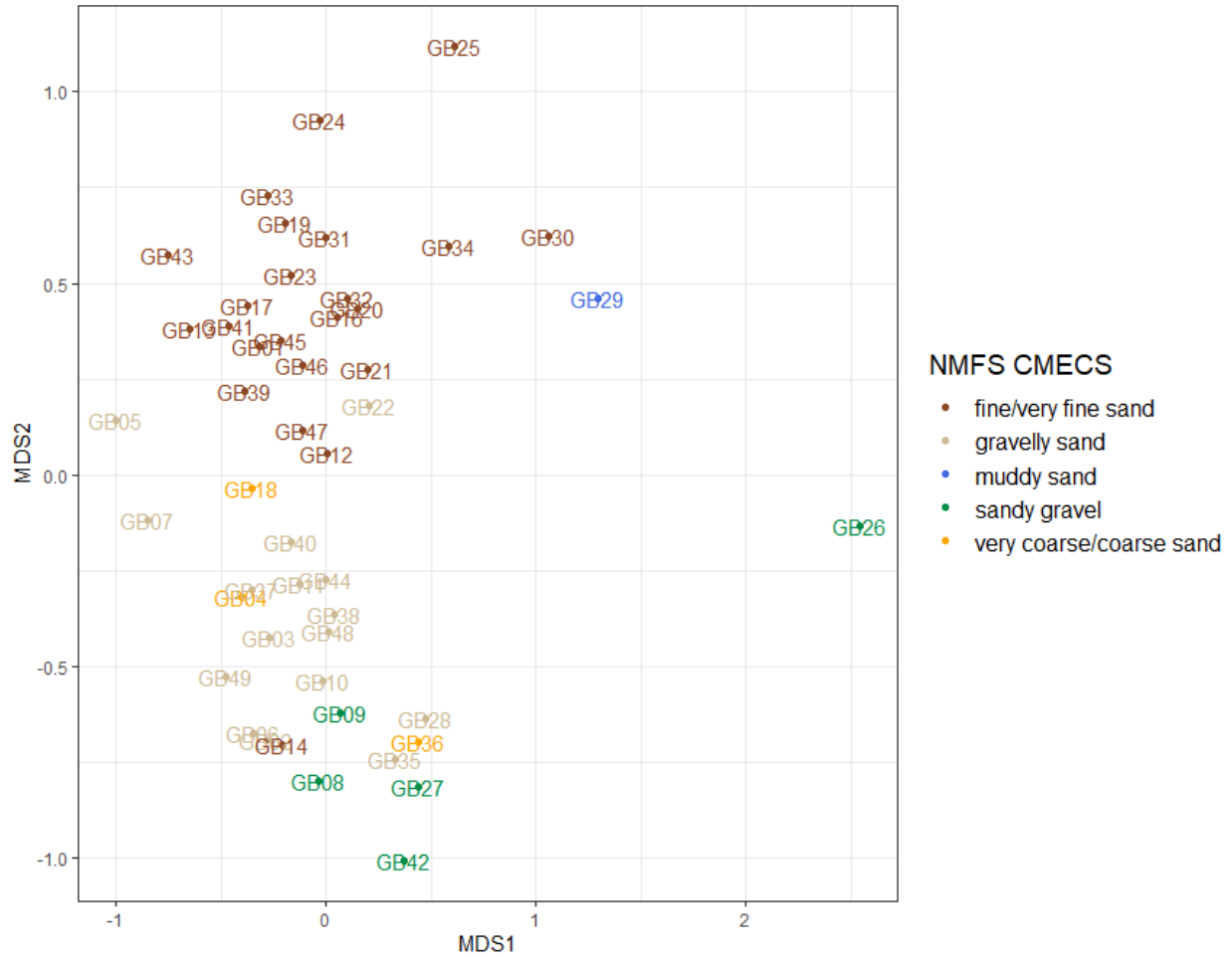


Figure 3-7. NMDS plot of Bray-Curtis similarities of square-root transformed taxonomic abundances at each sample station. Points are color-coded based on NMFS (2020) modified CMECS substrate component types.

Table 3-60. SIMPER results presenting the dissimilarity of community compositions between NMFS (2020) modified CMECS substrate types.

Substrate Type (A)	Substrate Type (B)	Bray-Curtis Dissimilarity	Dissimilar Taxa ¹	% Contribution
Sandy Gravel	Fine/Very Fine Sand	94%	Nematoda	19%
			Ampeliscidae	8%
			Oligochaeta	7%
Gravelly Sand	Fine/Very Fine Sand	84%	Ampeliscidae	11%
			Nematoda	10%
			Echinoidea	7%
Sandy Gravel	Very Coarse/Coarse Sand	83%	Nematoda	18%
			Syllidae	9%
			Paraonidae	8%
Very Coarse/Coarse Sand	Fine/Very Fine Sand	81%	Ampeliscidae	10%
			Paraonidae	10%
			Syllidae	8%
Gravelly Sand	Sandy Gravel	78%	Nematoda	20%
			Oligochaeta	8%
			Polygordiidae	5%
Gravelly Sand	Very Coarse/Coarse Sand	73%	Nematoda	11%
			Paraonidae	10%
			Syllidae	10%

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APPENDIX A

Table A - 1. Locations and CMECS classifications for each grab sample. CMECS classifications are provided using the NMFS (2020) recommendations and FGDC (2012) procedure. Finer sand includes very fine, fine and medium sand while coarser sand includes coarse and very coarse sand.

Station	Latitude (°N)	Longitude (°W)	NMFS modified CMECS	FGDC CMECS
1	36.29020	75.08876	fine/very fine sand	finer sand with trace shell hash
2	36.31163	75.00535	gravelly sand	slightly gravelly sand with sparse shell hash
3	36.29624	75.00798	gravelly sand	slightly gravelly sand with sparse shell hash
4	36.27485	75.01886	very coarse/coarse sand	coarse sand with sparse shell hash
5	36.24870	75.03309	gravelly sand	slightly gravelly sand with sparse shell hash
6	36.24472	75.00543	gravelly sand	slightly gravelly sand with moderate shell hash
7	36.22849	75.01916	gravelly sand	slightly gravelly sand with sparse shell hash
8	36.19218	75.03325	sandy gravel	sandy gravel with moderate shell hash and sparse worm tubes
9	36.19153	75.00487	sandy gravel	sandy gravel with sparse shell hash
10	36.16116	75.00465	gravelly sand	gravelly sand with sparse shell hash
11	36.23848	75.06060	gravelly sand	slightly gravelly sand with sparse shell hash
12	36.28860	75.06103	fine/very fine sand	finer sand with trace shell hash
13	36.37869	75.06080	fine/very fine sand	finer sand with trace shell hash
14	36.34120	75.14026	gravelly sand	slightly gravelly sand with moderate shell hash
15	36.41104	75.13129	fine/very fine sand	finer sand with trace shell hash
16	36.40878	75.18838	fine/very fine sand	finer sand with trace shell hash
17	36.36870	75.18809	fine/very fine sand	finer sand with trace shell hash
18	36.47621	75.33841	very coarse/coarse sand	coarser sand with trace shell hash
19	36.49041	75.38307	fine/very fine sand	finer sand with trace shell hash
20	36.50718	75.43467	fine/very fine sand	finer sand with trace shell hash
21	36.52364	75.48689	fine/very fine sand	finer sand with trace shell hash
22	36.54006	75.53886	gravelly sand	slightly gravelly sand with trace shell hash
23	36.57295	75.64201	fine/very fine sand	finer sand with trace shell hash
24	36.58973	75.69445	fine/very fine sand	finer sand with trace shell hash
25	36.60582	75.74686	fine/very fine sand	finer sand with sparse shell hash
26	36.61665	75.77730	sandy gravel	gravelly sand with moderate shell cobble
27	36.64851	75.81702	sandy gravel	gravelly sand with moderate shell hash
28	36.68048	75.85677	gravelly sand	slightly gravelly sand with moderate shell hash
29	36.70996	75.89754	Muddy sand	muddy sand
30	36.72397	75.91918	fine/very fine sand	finer sand with trace shell hash
31	36.48230	75.35740	fine/very fine sand	finer sand with trace shell hash
32	36.51537	75.46115	fine/very fine sand	finer sand
33	36.54826	75.56480	fine/very fine sand	finer sand with trace shell hash

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Station	Latitude (°N)	Longitude (°W)	NMFS modified CMECS	FGDC CMECS
34	36.58161	75.66904	fine/very fine sand	finer sand with trace shell hash
35	36.63256	75.79711	gravelly sand	slightly gravelly sand with sparse shell hash
36	36.69544	75.87574	very coarse/coarse sand	slightly gravelly sand with sparse shell hash
37	36.42906	75.27438	gravelly sand	gravelly sand with sparse shell hash
38	36.46603	75.30621	gravelly sand	slightly gravelly sand with sparse shell hash
39	36.29243	75.13117	fine/very fine sand	finer sand with sparse shell hash
40	36.31884	75.06683	gravelly sand	slightly gravelly sand with moderate shell hash
41	36.35494	75.04731	fine/very fine sand	finer sand with trace shell hash
42	36.55741	75.59389	sandy gravel	slightly gravelly sand with moderate shell hash
43	36.29624	75.03638	fine/very fine sand	finer sand with sparse shell hash
44	36.21216	75.04672	gravelly sand	slightly gravelly sand with sparse shell hash and rubble
45	36.45372	75.29028	fine/very fine sand	finer sand with sparse shell hash
46	36.40869	75.27417	fine/very fine sand	finer sand with sparse shell hash
47	36.41417	75.20985	fine/very fine sand	finer sand with trace shell hash
48	36.38614	75.23425	gravelly sand	gravelly sand with sparse shell hash
49	36.43108	75.30845	gravelly sand	slightly gravelly sand with sparse shell hash

APPENDIX B

Table A - 2. Benthic macroinvertebrates identified to LPTL in each grab sample.

Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB01	2	Animalia	Chordata	Tunicata	Ascidiacea										
GB01	2	Animalia	Mollusca		Bivalvia										
GB01	4	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB01	8	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoidea			Nuculidae		Nucula		Nucula proxima
GB01	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB01	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Arcticoidea	Arcticidae		Arctica		Arctica islandica
GB01	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB01	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Semelidae		Ervilia		Ervilia concentrica
GB01	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Ungulinidae		Diplodonta		sp.
GB01	2	Animalia	Echinodermata		Echinoidea										
GB01	5	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Eratoidea		Eratoidea hematita
GB01	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB01	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB01	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB01	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB01	21	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB01	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Diastylidae		Oxyurostylis		Oxyurostylis smithi
GB01	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB01	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Flabellifera		Cirolanidae		Politolana		Politolana polita
GB01	7	Animalia	Arthropoda	Crustacea	Ostracoda										
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera americana
GB01	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB01	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllococida		Nephtyidae		Nephtys		Nephtys picta
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllococida		Phyllococidae		Phyllodoce		Phyllodoce mucosa
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllococida		Sigalionidae		Sthenelais		Sthenelais limicola
GB01	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB01	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB02	12	Animalia	Nematoda												
GB02	4	Animalia	Nemertea		Anopla			Paleonemertea			Carinomidae		Carinomella		Carinomella lactea
GB02	3	Animalia	Chordata	Tunicata	Ascidacea										
GB02	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB02	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae		Crenella		Crenella decussata
GB02	3	Animalia	Mollusca		Bivalvia	Pteriomorphia		Ostreoida			Pectinidae				
GB02	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Carditoidea	Carditidae		Cyclocardia		Cyclocardia borealis
GB02	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Galeommatoidae	Montacutidae		Mysella		Mysella planulata
GB02	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Ungulinidae		Diplodonta		sp.
GB02	6	Animalia	Annelida		Clitellata	Oligochaeta									
GB02	2	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginebellidae		Prunum		Prunum roscidum
GB02	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca vadorum
GB02	32	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB02	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB02	12	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB02	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidae	Maeridae				
GB02	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Phoxocephalus		Phoxocephalus holbolli
GB02	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB02	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Mysida			Mysidae				
GB02	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella mucosa
GB02	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Armandia		Armandia maculata
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Pettiboneia		Pettiboneia duofurca
GB02	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB02	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB02	8	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB02	20	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB02	7	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		sp.
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Polynoidea		Harmothoe		Harmothoe imbricata
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Syllides		Syllides fulvus
GB02	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Ampharete		Ampharete finmarchica
GB02	49	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB02	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB03	2	Animalia	Nemertea												
GB03	16	Animalia	Nematoda												
GB03	1	Animalia	Mollusca		Bivalvia										
GB03	4	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB03	3	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB03	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae				
GB03	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB03	3	Animalia	Annelida		Clitellata	Oligochaeta									
GB03	6	Animalia	Echinodermata		Echinoidea										
GB03	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB03	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB03	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB03	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB03	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB03	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB03	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB03	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB03	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Brania		Brania wellfleetensis
GB03	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB03	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB03	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB04	6	Animalia	Nematoda												
GB04	7	Animalia	Chordata	Tunicata	Ascidiacea										
GB04	1	Animalia	Mollusca		Bivalvia										
GB04	1	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB04	1	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB04	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea			Astartidae		Astarte		Astarte castanea
GB04	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomata		Branchiostoma		Branchiostoma virginiae
GB04	6	Animalia	Annelida		Clitellata	Oligochaeta									
GB04	8	Animalia	Echinodermata		Echinoidea										
GB04	1	Animalia	Nemertea		Enopla			Hoplonemertea	Monostilifera		Amphiporidae		Amphiporus		Amphiporus ochraceus
GB04	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB04	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB04	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB04	19	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB04	3	Animalia	Arthropoda	Crustacea	Ostracoda										
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Capitellidae		Notomastus		Notomastus hemipodus
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Maldanidae		Clymenella		Clymenella mucosa
GB04	4	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera americana
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Oeonidae		Arabella		Arabella iricolor
GB04	3	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB04	3	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Terebellidae		Loimia		Loimia medusa
GB04	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB05	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Prunum		Prunum roscidum
GB05	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB05	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB05	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB05	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB05	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB05	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB05	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB05	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida	Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB06	4	Animalia	Nematoda												

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB06	4	Animalia	Nemertea		Anopla			Paleonemertea			Cephalothricidae				
GB06	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB06	4	Animalia	Annelida		Clitellata	Oligochaeta									
GB06	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		sp.
GB06	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB06	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB06	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae				
GB06	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB06	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis varians
GB06	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB06	4	Animalia	Arthropoda	Crustacea	Ostracoda										
GB06	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB06	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera americana
GB06	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB06	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB06	6	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB06	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB06	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB06	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB06	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB06	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB07	3	Animalia	Nematoda												
GB07	1	Animalia	Nemertea		Anopla			Paleonemertea			Carinomidae		Carinomella		Carinomella lactea
GB07	1	Animalia	Mollusca		Bivalvia										
GB07	1	Animalia	Echinodermata		Echinoidea										
GB07	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB07	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB07	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Capitellidae		Notomastus		Notomastus latericeus
GB07	3	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Maldanidae		Clymenella		Clymenella mucosa
GB07	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB07	2	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Onuphidae				
GB07	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB07	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida		Orbiniida		Paraonidae		Paraonis		Paraonis pygoenigmatica
GB08	1	Animalia	Nemertea												
GB08	83	Animalia	Nematoda												
GB08	1	Animalia	Nemertea		Anopla			Paleonemertea			Carinomidae		Carinomella		Carinomella lactea
GB08	1	Animalia	Mollusca		Bivalvia	Pteriomorpha		Ostreoida			Pectinidae				
GB08	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Cardioidea	Cardiidae				
GB08	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Lucinoidea	Ungulinidae		Diplodonta		sp.
GB08	2	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB08	19	Animalia	Annelida		Clitellata	Oligochaeta									
GB08	2	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Prunum		Prunum roscidum
GB08	1	Animalia	Mollusca		Gastropoda			Notaspidea			Pleurobranchidae		Pleurobranchaea		Pleurobranchaea tarda
GB08	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB08	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB08	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB08	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB08	2	Animalia	Echinodermata	Asterozoa	Ophiuroidea			Ophiurida			Amphiuridae				
GB08	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB08	2	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Capitellidae		Notomastus		sp.
GB08	9	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Maldanidae		Clymenella		Clymenella zonalis
GB08	5	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Eunicidae		Marphysa		Marphysa bellii

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB08	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB08	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB08	6	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB08	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB08	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB08	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB08	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB08	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia cf. dorsobranchialis
GB08	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB08	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB08	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae				
GB08	13	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB09	58	Animalia	Nematoda												
GB09	1	Animalia	Nemertea		Anopla			Heteronemertea			Lineidae		Micrura		sp.
GB09	1	Animalia	Mollusca		Bivalvia										
GB09	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae				
GB09	1	Animalia	Mollusca		Bivalvia	Pteriomorphia		Ostreoida			Pectinidae				
GB09	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Carditoidea	Carditidae		Cyclocardia		Cyclocardia borealis
GB09	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Lucinoidea	Ungulinidae		Diplodonta		Diplodonta punctata
GB09	4	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB09	17	Animalia	Annelida		Clitellata	Oligochaeta									
GB09	1	Animalia	Nemertea		Enopla			Hoplonemertea	Monostilifera		Tetrastemmatidae		Tetrastemma		sp.
GB09	1	Animalia	Mollusca		Gastropoda			Cephalaspidea			Retusidae		Pyrunculus		Pyrunculus caelatus
GB09	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca vadorum
GB09	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB09	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB09	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae				
GB09	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB09	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis varians
GB09	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Xanthoidea	Panopeidae				
GB09	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Notomastus		Notomastus latericeus
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Notomastus		sp.
GB09	7	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella zonalis
GB09	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Armandia		Armandia maculata
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Travisia		Travisia parva
GB09	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB09	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB09	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB09	12	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Aglaophamus		Aglaophamus circinata
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB09	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Phyllodoce		Phyllodoce mucosa
GB09	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB09	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB09	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB09	9	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB09	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial	
GB10	91	Animalia	Nematoda													
GB10	1	Animalia	Nemertea													
GB10	1	Animalia	Cnidaria		Anthozoa			Actiniaria								
GB10	2	Animalia	Chordata	Tunicata	Ascidiacea											
GB10	2	Animalia	Mollusca		Bivalvia		Anomalodesmata			Periplomatidae			Periploma		sp.	
GB10	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae					
GB10	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea			Astartidae		Astarte		Astarte castanea	
GB10	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Cardioidea	Cardiidae					
GB10	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Crassatelloidea	Crassatellidae		Crassinella		Crassinella lunulata	
GB10	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae					
GB10	3	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae	
GB10	9	Animalia	Annelida		Clitellata	Oligochaeta										
GB10	3	Animalia	Echinodermata		Echinoidea											
GB10	3	Animalia	Mollusca		Gastropoda				Neotaenioglossa			Caecidae		Caecum		Caecum johnsoni
GB10	1	Animalia	Cnidaria		Hydrozoa											
GB10	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca vadorum	
GB10	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata	
GB10	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.	
GB10	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae					
GB10	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus	
GB10	1	Animalia	Arthropoda	Crustacea	Maxillopoda	Copepoda		Harpacticoida								
GB10	1	Animalia	Echinodermata	Asterozoa	Ophiuroidea			Ophiurida			Amphiuridae					
GB10	1	Animalia	Arthropoda	Crustacea	Ostracoda											
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella zonalis	
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Armandia		Armandia maculata	
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini	

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Eunicidae		Marphysa		Marphysa bellii
GB10	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB10	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB10	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB10	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB10	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Diopatra		Diopatra cuprea
GB10	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB10	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB10	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae				
GB10	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Exogone		Exogone hebes
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB10	9	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		sp.
GB10	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB10	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB11	16	Animalia	Nematoda												
GB11	1	Animalia	Mollusca		Bivalvia										
GB11	5	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB11	1	Animalia	Mollusca		Bivalvia	Pteriomorphia		Ostreoida			Pectinidae				
GB11	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae				
GB11	7	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea	Pharidae		Ensis		Ensis leei
GB11	30	Animalia	Annelida		Clitellata	Oligochaeta									

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB11	6	Animalia	Echinodermata		Echinozoa										
GB11	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB11	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Argissidae		Argissa		Argissa hamatipes
GB11	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB11	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB11	39	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB11	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Synopiidae		Tiron		Tiron spiniferus
GB11	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Cancroidea	Cancridae		Cancer		Cancer irroratus
GB11	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB11	4	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella mucosa
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Pettiboneia		Pettiboneia duofurca
GB11	6	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Eunicidae		Marphysa		Marphysa bellii
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera americana
GB11	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB11	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB11	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia cf. dorsobranchialis
GB11	8	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Microspio		Microspio pigmentata
GB11	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea (Acmira)		Aricidea (Acmira) cerrutii

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB11	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB12	2	Animalia	Nematoda												
GB12	1	Animalia	Chordata	Tunicata	Ascidiacea										
GB12	1	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB12	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Arcticoidea	Arcticidae		Arctica		Arctica islandica
GB12	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Lucinidae		Parvilucina		Parvilucina crenella
GB12	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea	Pharidae		Ensis		Ensis leei
GB12	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Angulus		Angulus versicolor
GB12	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Ungulinidae		Diplodonta		Diplodonta punctata
GB12	5	Animalia	Annelida		Clitellata	Oligochaeta									
GB12	32	Animalia	Echinodermata		Echinoidea										
GB12	1	Animalia	Brachiopoda	Linguliformea	Lingulata			Lingulida			Lingulidae		Glottidia		Glottidia pyramidata
GB12	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscaidae		Byblis		Byblis serrata
GB12	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB12	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB12	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB12	1	Protozoa	Foraminifera		Monothalamea			Astrorhizida			Astrorhizidae		Astrorhiza		sp.
GB12	9	Animalia	Arthropoda	Crustacea	Ostracoda										
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella zonalis
GB12	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Scalibregmatidae		Scalibregma		Scalibregma inflatum
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera americana
GB12	11	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB12	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB12	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB12	7	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB12	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Tharyx		Tharyx sp. A sensu MWRA 2007
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Sabellida		Oweniidae		Owenia		Owenia fusiformis
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB12	3	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida		Orbiniida		Orbiniidae				
GB12	9	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida		Orbiniida		Orbiniidae		Scoloplos		Scoloplos acmeceps
GB12	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida		Orbiniida		Paraonidae		Acmira	Aricidea (Acmira)	catherinae
GB13	1	Animalia	Mollusca		Bivalvia		Heterodonta		Veneroidea		Solenioidea		Pharidae		Ensis leei
GB13	42	Animalia	Echinodermata		Echinoidea										
GB13	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB13	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Parahaustorius		Parahaustorius holmesi
GB13	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB13	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB13	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Chaetiliidae		Chiridotea		Chiridotea tuftsii
GB13	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Magelonidae		Magelona		Magelona papillicornis
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea (Aricidea)		Aricidea (Aricidea) wassi
GB13	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Paraonis		Paraonis pygoenigmatica
GB14	4	Animalia	Nemertea												
GB14	29	Animalia	Nematoda												
GB14	1	Animalia	Nemertea		Anopla		Palaeonemertea				Tubulanidae		Tubulanus		Tubulanus pellucidus
GB14	1	Animalia	Chordata	Tunicata	Ascidacea										
GB14	1	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB14	7	Animalia	Echinodermata		Echinoidea										

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB14	1	Animalia	Mollusca		Gastropoda			Cephalaspidea							
GB14	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca vadorum
GB14	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB14	22	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB14	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB14	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae				
GB14	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Maldanidae		Clymenella		Clymenella zonalis
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Opheliidae		Armandia		Armandia maculata
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Eunicidae		Marphysa		Marphysa bellii
GB14	4	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Hesionidae		Microphthalmus		sp.
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Polynoidae		Harmothoe		Harmothoe imbricata
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB14	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Cirratulidae				
GB14	3	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB14	3	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB16	16	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB16	3	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoidea			Nuculidae		Nucula		Nucula proxima
GB16	4	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Arcticoidea	Arcticidae		Arctica		Arctica islandica
GB16	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Carditoidea	Carditidae		Cyclocardia		Cyclocardia borealis
GB16	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Semelidae		Ervilia		Ervilia concentrica

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB16	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB16	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Angulus		Angulus versicolor
GB16	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Veneroidea	Veneridae				
GB16	13	Animalia	Echinodermata												
GB16	1	Animalia	Nemertea			Enopla		Hoplonemertea	Monostilifera		Emplectonematae		Kirsteueriella		Kirsteueriella biocellatus
GB16	2	Animalia	Mollusca			Gastropoda		Neogastropoda			Marginebellidae		Eratoidea		Eratoidea hematita
GB16	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB16	210	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB16	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola irrorata
GB16	9	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB16	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Listriella		Idunella barnardi
GB16	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB16	46	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB16	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis varians
GB16	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB16	34	Animalia	Arthropoda	Crustacea	Ostracoda										
GB16	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB16	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB16	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB16	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB16	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Leitoscoloplos		sp.

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB16	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Phylo		Phylo felix
GB16	3	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB16	9	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae			Acmira	Aricidea (Acmira) catherinae
GB16	29	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB17	4	Animalia	Mollusca		Bivalvia										
GB17	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB17	5	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoidea			Nuculidae		Nucula		Nucula proxima
GB17	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae				
GB17	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Angulus		Angulus versicolor
GB17	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Veneroidea	Veneridae				
GB17	77	Animalia	Echinodermata		Echinoidea										
GB17	2	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Eratoidea		Eratoidea hematita
GB17	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cupuladriidae		Reussirella		Reussirella doma
GB17	1	Animalia	Cnidaria		Hydrozoa										
GB17	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB17	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola irrorata
GB17	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB17	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB17	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB17	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB17	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB17	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Processoidea	Processidae		Processa		Processa hemphilli
GB17	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB17	3	Animalia	Arthropoda	Crustacea	Ostracoda										
GB17	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB17	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB17	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos rubra
GB17	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB18	1	Animalia	Nematoda												
GB18	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB18	4	Animalia	Annelida		Clitellata	Oligochaeta									
GB18	19	Animalia	Echinodermata		Echinoidea										
GB18	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB18	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB18	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB18	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB18	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Flabellifera		Cirolanidae		Politolana		Politolana polita
GB18	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB18	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Parougia		Parougia caeca
GB18	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB18	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB18	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB18	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri
GB18	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB18	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB18	3	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB18	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB19	2	Animalia	Mollusca		Bivalvia										
GB19	12	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae				
GB19	6	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB19	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB19	4	Animalia	Echinodermata		Echinozoa										
GB19	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB19	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB19	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB19	9	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Corophiidae		Apocorophium		Apocorophium simile
GB19	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsii
GB19	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB19	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB19	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB19	1	Animalia	Arthropoda	Crustacea	Maxillopoda	Copepoda		Harpacticoida							
GB19	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB19	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB19	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB19	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Orbinia		sp.
GB19	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB19	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB20	2	Animalia	Nematoda												
GB20	4	Animalia	Nemertea												
GB20	8	Animalia	Mollusca		Bivalvia										
GB20	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB20	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Veneroidea	Veneridae		Pitar		Pitar morrhuanus
GB20	1	Animalia	Mollusca		Gastropoda			Heterostropha			Pyramidellidae		Turbonilla		sp.
GB20	2	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB20	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cribrilinidae		Cribrilina		Cribrilina macropunctata
GB20	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB20	68	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB20	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola irrorata
GB20	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Corophiidae		Apocorophium		Apocorophium simile
GB20	16	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB20	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB20	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB20	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae				
GB20	3	Animalia	Arthropoda	Crustacea	Ostracoda										
GB20	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB20	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB20	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB20	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Phylo		Phylo felix
GB20	23	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira		Aricidea (Acmira) catherinae
GB20	17	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea (Aricidea)		Aricidea (Aricidea) wassi
GB20	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Paraonis		Paraonis fulgens
GB21	1	Animalia	Nematoda												
GB21	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae				
GB21	1	Animalia	Mollusca		Bivalvia			Mytiloida			Mytilidae				
GB21	4	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoida			Nuculidae		Nucula		Nucula proxima
GB21	64	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea					
GB21	8	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB21	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Tellinoidea	Tellinidae		Angulus		Angulus versicolor
GB21	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB21	1	Animalia	Annelida		Clitellata	Oligochaeta									
GB21	2	Animalia	Echinodermata		Echinoidea										
GB21	1	Animalia	Mollusca		Gastropoda			Cephalaspidea			Cylichnidae		Cylichnella		Cylichnella bidentata
GB21	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB21	11	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB21	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB21	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola irrorata
GB21	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB21	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB21	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB21	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB21	13	Animalia	Arthropoda	Crustacea	Ostracoda										
GB21	5	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Scalibregmatidae		Scalibregma		Scalibregma inflatum
GB21	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Oeonidae		Drilonereis		Drilonereis longa
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Chaetopteridae		Spiochaetopterus		Spiochaetopterus oculatus
GB21	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB21	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio pygmaeus
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB21	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB21	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos rubra
GB22	2	Animalia	Nemertea												
GB22	1	Animalia	Nemertea		Anopla			Heteronemertea			Lineidae				
GB22	11	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB22	6	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB22	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB22	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB22	2	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB22	2	Animalia	Annelida		Clitellata	Oligochaeta									
GB22	1	Animalia	Echinodermata		Echinoidea										
GB22	2	Animalia	Mollusca		Gastropoda			Heterostropha			Pyramidellidae		Turbonilla		sp.
GB22	3	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB22	13	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB22	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB22	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB22	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB22	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Synopiidae		Tiron		Tiron spiniferus
GB22	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Amakusanthura		Amakusanthura magnifica
GB22	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB22	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB22	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Oeonidae		Drilonereis		Drilonereis longa
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB22	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB22	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio pygmaeus
GB22	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Leitoscoloplos		Leitoscoloplos fragilis
GB22	11	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB22	4	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB23	4	Animalia	Nematoda												
GB23	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Arcticoidea	Arcticidae		Arctica		Arctica islandica
GB23	13	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB23	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Semelidae		Ervilia		Ervilia concentrica
GB23	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Angulus		Angulus versicolor
GB23	9	Animalia	Echinodermata		Echinoidea										
GB23	4	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB23	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB23	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB23	15	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB23	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB23	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis pustulata
GB23	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae				
GB23	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB23	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Notomastus		Notomastus hemipodus
GB23	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Oeonidae		Drilonereis		Drilonereis longa
GB23	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB23	3	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB23	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Cirrophorus		Cirrophorus furcatus
GB24	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB24	6	Animalia	Echinodermata		Echinoidea										
GB24	2	Animalia	Echinodermata		Echinoidea			Clypeasteroidea			Echinarachniidae		Echinarachnius		Echinarachnius parma
GB24	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB24	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsi
GB24	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB24	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB24	9	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB24	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB24	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB24	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB24	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB24	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB24	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Cirrophorus		Cirrophorus furcatus
GB25	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae		Tubulanus		Tubulanus pellucidus
GB25	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Macroidea	Mactridae		Spisula		Spisula solidissima
GB25	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea	Pharidae		Ensis		Ensis leei
GB25	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB25	1	Animalia	Arthropoda	Crustacea	Cephalocarida						Hutchinsoniellidae		Hutchinsoniella		Hutchinsoniella macracantha
GB25	3	Animalia	Echinodermata		Echinoidea										
GB25	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda					Acanthohaustorius		sp.
GB25	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB25	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Synopiidae		Tiron		Tiron spiniferus
GB25	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Diastylidae		Oxyurostylis		Oxyurostylis smithi
GB25	4	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Travisia		Travisia parva
GB25	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB26	5	Animalia	Mollusca		Gastropoda			Neogastropoda			Columbellidae		Anachis		Cotonopsis lafresnayi
GB26	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae				
GB27	81	Animalia	Nematoda												
GB27	3	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae				
GB27	1	Animalia	Nemertea		Anopla			Heteronemertea			Lineidae				
GB27	1	Animalia	Mollusca		Bivalvia										
GB27	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea	Pharidae		Ensis		Ensis leei
GB27	4	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomata		Branchiostoma		Branchiostoma virginiae
GB27	79	Animalia	Annelida		Clitellata	Oligochaeta									
GB27	1	Animalia	Mollusca		Gastropoda			Neotaenioglossa			Calyptraeidae		Crepidula		sp.

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB27	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB27	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Bateidae		Batea		Batea catharinensis
GB27	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Listriella		Idunella barnardi
GB27	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		Pagurus arcuatus
GB27	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		sp.
GB27	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda					Cyathura		Cyathura burbanki
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Mediomastus		Mediomastus ambiseta
GB27	5	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Notomastus		sp.
GB27	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella mucosa
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Chrysopetalidae		Paleanotus		Paleanotus heteroseta
GB27	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB27	17	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB27	6	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB27	11	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB27	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Exogone		Exogone dispar
GB27	60	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB27	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Sphaerosyllis		Sphaerosyllis taylori
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Asabellides		Ampharete oculata
GB27	51	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB27	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia baptisteeae
GB27	14	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Tharyx		Tharyx sp. A sensu MWRA 2007
GB27	9	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Polydora		Polydora cornuta
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio perkinsi
GB27	8	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB27	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		sp.
GB27	51	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	catherinae
GB28	19	Animalia	Nematoda												
GB28	1	Animalia	Nemertea												
GB28	1	Animalia	Nemertea		Anopla			Heteronemertea			Lineidae		Cerebratulus		sp.
GB28	2	Animalia	Nemertea		Anopla			Heteronemertea			Lineidae		Micrura		sp.
GB28	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Crassatelloidea	Crassatellidae		Crassinella		Crassinella lunulata
GB28	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB28	36	Animalia	Annelida		Clitellata	Oligochaeta									
GB28	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Electridae		Electra		Electra monostachys
GB28	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB28	30	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Mediomastus		Mediomastus ambiseta
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Chrysopetalidae		Paleanotus		Paleanotus heteroseta
GB28	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB28	7	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Oeonidae		Drilonereis		Drilonereis longa
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Pilargidae		Sigambra		Sigambra tentaculata
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB28	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB28	23	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Aphelochaeta		Aphelochaeta marioni
GB28	16	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB28	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia baptistae
GB28	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia cf. dorsobranchialis
GB28	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Tharyx		Tharyx sp. A sensu MWRA 2007

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB28	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio perkinsi
GB28	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB28	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis
GB28	9	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB28	69	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB29	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB29	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB29	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB29	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Macoma		Macoma balthica
GB29	2	Animalia	Mollusca		Gastropoda			Cephalaspidea			Cylichnidae		Cylichnella		Cylichnella bidentata
GB29	1	Animalia	Mollusca		Gastropoda			Heterostropha			Pyramidellidae		Turbonilla		sp.
GB29	4	Animalia	Mollusca		Gastropoda			Neogastropoda			Columbellidae		Parvanachis		Parvanachis obesa
GB29	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB29	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Microprotopidae		Microprotopus		Microprotopus raneyi
GB29	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Mediomastus		sp.
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera capitata
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Aglaophamus		Aglaophamus verrilli
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB29	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Asabellides		Ampharete oculata
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Sabellida		Oweniidae		Owenia		Owenia fusiformis
GB29	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio pygmaeus
GB29	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB30	1	Animalia	Nematoda												

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB30	1	Animalia	Mollusca		Bivalvia	Pteriomorpha		Arcoida			Arcidae		Anadara		Lunarca ovalis
GB30	6	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB30	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea	Pharidae		Ensis		Ensis leei
GB30	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB30	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Microprotopidae		Microprotopus		Microprotopus raneyi
GB30	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB30	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Diastylidae		Oxyurostylis		Oxyurostylis smithi
GB30	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Pinnotheroidea	Pinnotheridae		Pinnixa		Pinnixa lunzi
GB30	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Capitellidae		Mediomastus		sp.
GB30	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB30	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Aglaophamus		Aglaophamus verilli
GB30	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB30	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Sabellida		Oweniidae		Owenia		Owenia fusiformis
GB30	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio pygmaeus
GB30	79	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB30	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Scolecopsis		Scolecopsis (Parascolecopsis) texana
GB30	11	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB30	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB31	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae				
GB31	3	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoidea			Nuculidae		Nucula		Nucula proxima
GB31	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB31	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea	Pharidae		Ensis		Ensis leei
GB31	1	Animalia	Echinodermata		Echinozoa										
GB31	82	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB31	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB31	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB31	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB31	31	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		sp.
GB31	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		sp.
GB31	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB31	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB31	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Asabellides		Ampharete oculata
GB31	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB31	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB31	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB32	1	Animalia	Nematoda												
GB32	1	Animalia	Mollusca		Bivalvia										
GB32	3	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoida			Nuculidae		Nucula		Nucula proxima
GB32	9	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea					
GB32	11	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB32	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB32	14	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB32	88	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB32	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB32	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Listriella		Idunella barnardi
GB32	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB32	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB32	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB32	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata		Ogyrididae		Ogyrides		Ogyrides alphaerostris
GB32	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Portunoidea	Polybiidae		Ovalipes		Ovalipes ocellatus
GB32	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Anthuridea		Anthuridae		Ptilanthura		Ptilanthura tenuis
GB32	4	Animalia	Arthropoda	Crustacea	Ostracoda										

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB32	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Scalibregmatidae		Scalibregma		Scalibregma inflatum
GB32	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB32	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB32	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB32	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB32	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB32	5	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida			Orbiniida		Paraonidae			Acmira	Aricidea (Acmira) catherinae
GB32	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida			Orbiniida		Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB33	1	Animalia	Nemertea		Anopla			Heteronemerta			Lineidae				
GB33	4	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea					
GB33	9	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB33	1	Animalia	Echinodermata		Echinoidea										
GB33	5	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB33	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB33	32	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB33	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsii
GB33	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB33	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB33	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB33	9	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		sp.
GB33	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB33	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB33	4	Animalia	Arthropoda	Crustacea	Ostracoda										
GB33	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB33	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB33	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB34	4	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB34	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB34	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Veneroidea	Veneridae		Mercenaria		sp.
GB34	6	Animalia	Echinodermata			Echinoidea									
GB34	2	Animalia	Mollusca		Gastropoda	Caenogastropoda				Conoidea	Mangeliidae		Cryoturris		Cryoturris cerinella
GB34	5	Animalia	Mollusca		Gastropoda			Heterostropha			Pyramidellidae		Turbonilla		sp.
GB34	14	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB34	1	Animalia	Mollusca		Gastropoda			Neotaenioglossa			Calyptraeidae		Crepidula		Crepidula plana
GB34	1	Animalia	Cnidaria			Hydrozoa									
GB34	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca verrilli
GB34	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB34	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB34	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata		Ogyrididae		Ogyrides		Ogyrides alphaerostris
GB34	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		Pagurus politus
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Scalibregmatidae		Scalibregma		Scalibregma inflatum
GB34	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae				
GB34	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Phyllodoce		Phyllodoce mucosa
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Asabellides		Ampharete oculata
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB34	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio pygmaeus
GB34	16	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		sp.
GB34	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spiophanes		Spiophanes bombyx Complex
GB34	7	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira		Aricidea (Acmira) catherinae
GB34	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB35	4	Animalia	Nemertea												
GB35	102	Animalia	Nematoda												
GB35	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae		Tubulanus		Tubulanus pellucidus
GB35	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenoidea					
GB35	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae				
GB35	24	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB35	35	Animalia	Annelida		Clitellata	Oligochaeta									
GB35	1	Animalia	Annelida		Clitellata	Hirudinida		Rhynchobdellida			Piscicolidae				
GB35	1	Animalia	Nemertea		Enopla			Hoplonemertea	Monostilifera		Amphiporidae		Amphiporus		sp.
GB35	1	Animalia	Mollusca		Gastropoda			Neotaenioglossa			Naticidae		Neverita		Neverita duplicata
GB35	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Corophiidea		Photidae		Gammaropsis		Gammaropsis cf. nitida
GB35	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae				
GB35	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella zonalis
GB35	4	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Ophelia		Ophelia bicornis
GB35	12	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Travisia		Travisia parva
GB35	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB35	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Oeonidae		Drilonereis		Drilonereis longa
GB35	7	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Eumida		Eumida sanguinea
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Pisione		Pisione remota
GB35	12	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB35	34	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB35	9	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Sphaerosyllis		Sphaerosyllis taylori
GB35	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB35	8	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB35	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia baptisteae
GB35	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Tharyx		Tharyx acutus
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB35	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		Polycirrus eximius
GB35	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Terebellidae		Polycirrus		sp.
GB35	13	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB35	3	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB36	1	Animalia	Nemertea												
GB36	37	Animalia	Nematoda												
GB36	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae		Tubulanus		Tubulanus pellucidus
GB36	1	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoida			Nuculidae		Nucula		Nucula proxima
GB36	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB36	5	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea	Pharidae		Ensis		Ensis leei
GB36	8	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB36	56	Animalia	Annelida		Clitellata	Oligochaeta									
GB36	1	Animalia	Annelida		Clitellata	Hirudinida		Rhynchobdellida			Piscicolidae				
GB36	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae				
GB36	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB36	14	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB36	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Ophelia		Ophelia bicornis
GB36	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB36	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB36	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB36	10	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris tenuis

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB36	50	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB36	39	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB36	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri
GB36	58	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB36	12	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Aphelochaeta		Aphelochaeta marioni
GB36	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Tharyx		Tharyx sp. A sensu MWRA 2007
GB36	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB36	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB36	70	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB36	26	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB36	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Paradoneis		Paradoneis lyra
GB37	10	Animalia	Nematoda												
GB37	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae				
GB37	1	Animalia	Echinodermata		Asterozoa										
GB37	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Macrozoidea	Macruridae		Spisula		Spisula solidissima
GB37	4	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB37	2	Animalia	Annelida		Clitellata	Oligochaeta									
GB37	1	Animalia	Echinodermata		Echinozoa										
GB37	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB37	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB37	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB37	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB37	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		sp.
GB37	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Cancrozoidea	Cancridae		Cancer		Cancer irroratus
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB37	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB37	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Aphelochaeta		Aphelochaeta marioni
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB37	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeiceps
GB38	23	Animalia	Nematoda												
GB38	1	Animalia	Nemertea												
GB38	2	Animalia	Mollusca		Bivalvia										
GB38	5	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB38	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB38	4	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB38	22	Animalia	Annelida		Clitellata	Oligochaeta									
GB38	29	Animalia	Echinodermata		Echinoidea										
GB38	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cribrulinidae		Cribrulina		Cribrulina macropunctata
GB38	2	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cupuladriidae		Reussirella		Reussirella doma
GB38	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB38	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB38	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Hadzioidea		Maeridae				
GB38	11	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB38	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis varians
GB38	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		sp.
GB38	1	Animalia	Arthropoda	Crustacea	Maxillopoda	Copepoda		Harpacticoida							
GB38	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae				

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Pettiboneia		Pettiboneia duofurca
GB38	38	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB38	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB38	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Hesionidae		Microphthalmus		sp.
GB38	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Polynoidea		Harmothoe		Harmothoe extenuata
GB38	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sphaerodoridae		Sphaerodoropsis		Sphaerodoropsis corrugata
GB38	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Eusyllis		Eusyllis lamelligera
GB38	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Parapionosyllis		Parapionosyllis longicirrata
GB38	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB38	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Aphelochaeta		Aphelochaeta marioni
GB38	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB38	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB38	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Dipolydora		Dipolydora socialis
GB38	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida			Orbiniida		Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB38	14	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida			Orbiniida		Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii
GB38	7	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida			Orbiniida		Paraonidae		Paradoneis		Paradoneis lyra
GB39	1	Animalia	Nemertea		Anopla			Paleonemertea			Carinomidae		Carinomella		Carinomella lactea
GB39	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB39	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea	Pharidae		Ensis		Ensis leei
GB39	3	Animalia	Annelida		Clitellata	Oligochaeta									
GB39	4	Animalia	Echinodermata		Echinoidea										
GB39	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB39	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsi
GB39	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius deichmannae
GB39	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB39	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB39	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB39	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB39	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB39	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Glycera		Glycera capitata
GB39	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB39	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB39	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB39	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB40	2	Animalia	Mollusca		Bivalvia	Pteriormorphia		Ostreoida			Pectinidae				
GB40	5	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Solenioidea	Pharidae		Ensis		Ensis leei
GB40	11	Animalia	Annelida		Clitellata	Oligochaeta									
GB40	7	Animalia	Echinodermata		Echinoidea										
GB40	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Ampelisca		Ampelisca vadorum
GB40	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB40	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		sp.
GB40	11	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB40	9	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB40	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Cumacea			Bodotriidae		Cyclaspis		Cyclaspis varians
GB40	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB40	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae				
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Armandia		Armandia maculata
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Pettiboneia		Pettiboneia duofurca

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB40	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB40	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB40	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB40	8	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB40	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Dipolydora		Dipolydora socialis
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB40	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae				
GB40	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB41	1	Animalia	Nematoda												
GB41	1	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoida			Nuculidae		Nucula		Nucula proxima
GB41	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB41	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroida		Tellinoidea	Semelidae		Ervilia		Ervilia concentrica
GB41	9	Animalia	Echinodermata	Echinoidea											
GB41	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Eratoidea		Eratoidea hematita
GB41	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cupuladriidae		Reussirella		Reussirella doma
GB41	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB41	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsi
GB41	6	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB41	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB41	12	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB41	10	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB41	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Chaetiliidae		Chiridotea		Chiridotea tuftsii
GB41	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Idoteidae		Edotea		Edotea triloba
GB41	18	Animalia	Arthropoda	Crustacea	Ostracoda										

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB41	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis arenae
GB41	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB41	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB42	75	Animalia	Nematoda												
GB42	1	Animalia	Nemertea		Anopla	Palaeonemertea					Tubulanidae				
GB42	7	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB42	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB42	4	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB42	14	Animalia	Annelida		Clitellata	Oligochaeta									
GB42	1	Animalia	Mollusca		Gastropoda			Neotaenioglossa			Caecidae		Caecum		Caecum johnsoni
GB42	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cribrilineidae		Cribrilina		Cribrilina macropunctata
GB42	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Electridae		Electra		Electra monostachys
GB42	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Membraniporidae		Biflustra		Biflustra tenuis
GB42	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB42	29	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB42	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB42	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		Pagurus arcuatus
GB42	2	Animalia	Arthropoda	Crustacea	Maxillopoda	Copepoda		Harpacticoida							
GB42	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella mucosa
GB42	71	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Scalibregmatidae		Scalibregma		Scalibregma inflatum
GB42	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB42	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Polynoidea		Harmothoe		Harmothoe extenuata
GB42	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB42	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis
GB42	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Leitoscoloplos		Leitoscoloplos fragilis
GB43	2	Animalia	Nematoda												

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB43	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB43	1	Animalia	Echinodermata		Echinoidea										
GB43	1	Animalia	Cnidaria		Hydrozoa										
GB43	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsii
GB43	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB43	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB43	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB43	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		sp.
GB43	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Isopoda	Valvifera		Chaetiliidae		Chiridotea		Chiridotea tuftsii
GB43	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB43	8	Animalia	Arthropoda	Crustacea	Ostracoda										
GB43	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassii
GB44	2	Animalia	Nemertea												
GB44	34	Animalia	Nematoda												
GB44	2	Animalia	Chordata	Tunicata	Ascidiacea										
GB44	4	Animalia	Mollusca		Bivalvia										
GB44	4	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB44	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Periplomatidae		Periploma		sp.
GB44	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae				
GB44	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB44	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB44	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB44	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Semelidae		Ervilia		Ervilia concentrica
GB44	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomata		Branchiostoma		Branchiostoma virginiae
GB44	4	Animalia	Annelida		Clitellata	Oligochaeta									
GB44	18	Animalia	Echinodermata		Echinoidea										

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB44	2	Animalia	Mollusca		Gastropoda			NeotaenioGLOSSA			Caecidae		Caecum		Caecum johnsoni
GB44	2	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cupuladriidae		Reussirella		Reussirella doma
GB44	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB44	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae				
GB44	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB44	1	Animalia	Arthropoda	Crustacea	Maxillopoda	Copepoda		Harpacticoida							
GB44	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Opheliidae		Armandia		Armandia maculata
GB44	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB44	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae				
GB44	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sigalion		Sigalion arenicola
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Ampharetidae		Asabellides		Ampharete oculata
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Cauleriella		Cauleriella venefica
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Paraprionospio		Paraprionospio pinnata
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis
GB44	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Acmira catherinae
GB45	1	Animalia	Nematoda												
GB45	8	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB45	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB45	9	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB45	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB45	1	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomidae		Branchiostoma		Branchiostoma virginiae
GB45	1	Animalia	Annelida		Clitellata	Oligochaeta									
GB45	10	Animalia	Echinodermata		Echinozoa										

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB45	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Eratoidea		Eratoidea hematita
GB45	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB45	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Acanthohaustorius		Acanthohaustorius millsii
GB45	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB45	2	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB45	7	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB45	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Pontoporeiidae		Bathyporeia		Bathyporeia parkeri
GB45	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Eucarida	Decapoda	Pleocyemata	Paguroidea	Paguridae		Pagurus		Pagurus arcuatus
GB45	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus
GB45	2	Animalia	Arthropoda	Crustacea	Ostracoda										
GB45	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB45	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB46	4	Animalia	Nematoda												
GB46	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB46	3	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea					
GB46	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB46	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Solenioidea	Pharidae		Ensis		Ensis leei
GB46	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Tellinoidea	Tellinidae		Angulus		Angulus tenellus
GB46	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Ungulinidae		Diplodonta		Diplodonta punctata
GB46	3	Animalia	Echinodermata		Echinoidea										
GB46	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Marginellidae		Eratoidea		Eratoidea hematita
GB46	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB46	59	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB46	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Haustoriidae		Protohaustorius		Protohaustorius wigleyi
GB46	13	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB46	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Tanaidacea	Tanaidomorpha	Paratanaoidea	Tanaissuidae		Tanaissus		Tanaissus psammophilus

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB46	1	Animalia	Arthropoda	Crustacea	Ostracoda										
GB46	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB46	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB46	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB46	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri
GB46	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB46	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Magelonidae		Magelona		Magelona papillicornis
GB46	8	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB46	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Paraonis		Paraonis pygoenigmatica
GB47	2	Animalia	Mollusca		Bivalvia			Anomalodesmata			Pandoridae		Pandora		sp.
GB47	1	Animalia	Mollusca		Bivalvia			Mytiloidea			Mytilidae				
GB47	9	Animalia	Mollusca		Bivalvia	Protobranchia		Nuculoidea			Nuculidae		Nucula		Nucula proxima
GB47	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea			Astartidae		Astarte		sp.
GB47	2	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Carditoidea	Carditidae		Cyclocardia		Cyclocardia borealis
GB47	6	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Mactroidea	Mactridae		Spisula		Spisula solidissima
GB47	1	Animalia	Mollusca		Bivalvia	Heterodonta		Veneroidea		Lucinoidea	Ungulinidae		Diplodonta		Diplodonta punctata
GB47	1	Animalia	Annelida		Clitellata	Oligochaeta									
GB47	31	Animalia	Echinodermata		Echinoidea										
GB47	1	Animalia	Mollusca		Gastropoda			Neogastropoda			Nassariidae		Tritia		Tritia trivittata
GB47	8	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ampeliscidae		Byblis		Byblis serrata
GB47	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola irrorata
GB47	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB47	18	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB47	60	Animalia	Arthropoda	Crustacea	Ostracoda										
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae				
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida					Maldanidae		Clymenella		Clymenella torquata

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB47	6	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Scoletoma		Scoletoma verrilli
GB47	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Nephtyidae		Nephtys		Nephtys picta
GB47	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Onuphidae		Onuphis		Onuphis eremita
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Phyllodoce		Phyllodoce mucosa
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Sigalionidae		Sthenelais		Sthenelais limicola
GB47	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB47	2	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae		Kirkegaardia		Kirkegaardia baptisteeae
GB47	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB47	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Leitoscoloplos		Leitoscoloplos fragilis
GB47	1	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Orbiniidae		Scoloplos		Scoloplos acmeceps
GB47	5	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB47	2	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Aricidea	(Aricidea)	Aricidea (Aricidea) wassi
GB48	61	Animalia	Nematoda												
GB48	1	Animalia	Nemertea												
GB48	2	Animalia	Nemertea		Anopla		Palaeonemertea								Tubulanidae
GB48	1	Animalia	Echinodermata												
GB48	1	Animalia	Mollusca			Bivalvia		Anomalodesmata					Pandoridae		Pandora sp.
GB48	1	Animalia	Mollusca			Bivalvia		Mytiloida					Mytilidae		
GB48	5	Animalia	Mollusca			Bivalvia	Heterodonta	Veneroidea		Mactroidea			Mactridae		Spisula solidissima
GB48	7	Animalia	Mollusca			Bivalvia	Heterodonta	Veneroidea		Solenioidea			Pharidae		Ensis leei
GB48	4	Animalia	Chordata			Cephalochordata		Amphioxiformes					Branchiostomatae		Branchiostoma virginiae
GB48	19	Animalia	Annelida			Clitellata		Oligochaeta							
GB48	21	Animalia	Echinodermata					Echinoidea							
GB48	2	Animalia	Nemertea			Enopla		Hoplonemertea		Monostilifera			Emplectonematae		Kirsteueriella biocellatus

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB48	1	Animalia	Mollusca		Gastropoda			Neotaenioglossa			Caecidae		Caecum		Caecum johnsoni
GB48	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Aoridae		Unciola		Unciola serrata
GB48	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Ischyroceridae		Jassa		Jassa marmorata
GB48	20	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.
GB48	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB48	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius hudsoni
GB48	4	Animalia	Arthropoda	Crustacea	Ostracoda										
GB48	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB48	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB48	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Goniadidae		Goniadella		Goniadella gracilis
GB48	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB48	4	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Eunicida		Lumbrineridae		Scoletoma		Scoletoma tenuis
GB48	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Aciculata	Phyllodocida		Phyllodocidae		Hesionura		Hesionura elongata
GB48	3	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Terebellida		Cirratulidae				
GB48	5	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB48	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Prionospio		Prionospio steenstrupi
GB48	1	Animalia	Annelida	Aclitellata	Polychaeta	Palpata		Canalipalpata	Spionida		Spionidae		Spio		Spio filicornis
GB48	3	Animalia	Annelida	Aclitellata	Polychaeta	Scolecida		Orbiniida			Paraonidae		Paraonis		Paraonis fulgens
GB49	2	Animalia	Nematoda												
GB49	4	Animalia	Mollusca		Bivalvia										
GB49	2	Animalia	Chordata		Cephalochordata			Amphioxiformes			Branchiostomata		Branchiostoma		Branchiostoma virginiae
GB49	1	Animalia	Annelida		Clitellata	Oligochaeta									
GB49	8	Animalia	Echinodermata		Echinoidea										
GB49	1	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cribrillinae		Cribrillina		Cribrillina macropunctata
GB49	4	Animalia	Ectoprocta		Gymnolaemata			Cheilostomatida			Cupuladriidae		Reussirella		Reussirella doma
GB49	5	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Liljeborgiidae		Liljeborgia		sp.

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Grab Sample ID	Count	Kingdom	Phylum	Subphylum	Class	Subclass	Superorder	Order	Suborder	Superfamily	Family	Subtribe	Genus	Subgenus	Binomial
GB49	3	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda		Hadzioidea	Maeridae				
GB49	1	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda	Gammaridea		Oedicerotidae		Americhelidium		Americhelidium americanum
GB49	4	Animalia	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Peracarida	Amphipoda			Phoxocephalidae		Rhepoxynius		Rhepoxynius epistomus
GB49	3	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida				Maldanidae				
GB49	6	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Dorvilleidae		Pettiboneia		Pettiboneia duofurca
GB49	7	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Dorvilleidae		Protodorvillea		Protodorvillea kefersteini
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Glyceridae		Hemipodia		Hemipodia simplex
GB49	2	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Hesionidae		Microphthalmus		sp.
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrinerides		Lumbrinerides acuta
GB49	4	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Eunicida		Lumbrineridae		Lumbrineris		Lumbrineris fragilis
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Aciculata	Phyllodocida		Syllidae		Streptosyllis		Streptosyllis websteri
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Cirratulidae				
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Cirratulidae		Caulleriella		Caulleriella venefica
GB49	158	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata			Polygordiidae		Polygordius		Polygordius jouinae
GB49	1	Animalia	Annelida	Aclitellata	Polychaeta		Palpata	Canalipalpata	Terebellida		Terebellidae		Polycirrus		sp.
GB49	2	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida	Orbiniida			Paraonidae		Acmira	Aricidea (Acmira)	Aricidea (Acmira) catherinae
GB49	2	Animalia	Annelida	Aclitellata	Polychaeta		Scolecida	Orbiniida			Paraonidae		Aricidea	(Acmira)	Aricidea (Acmira) cerrutii

