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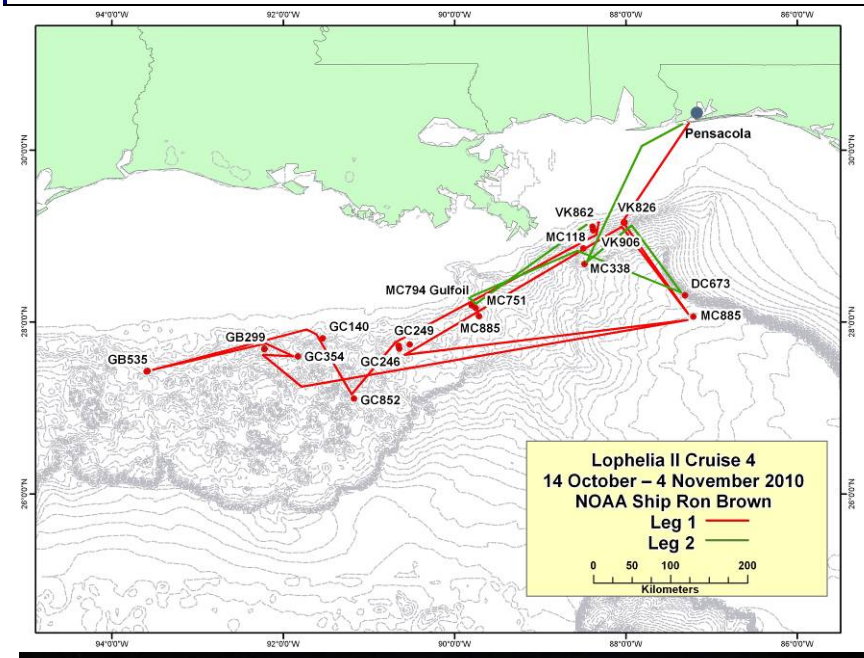
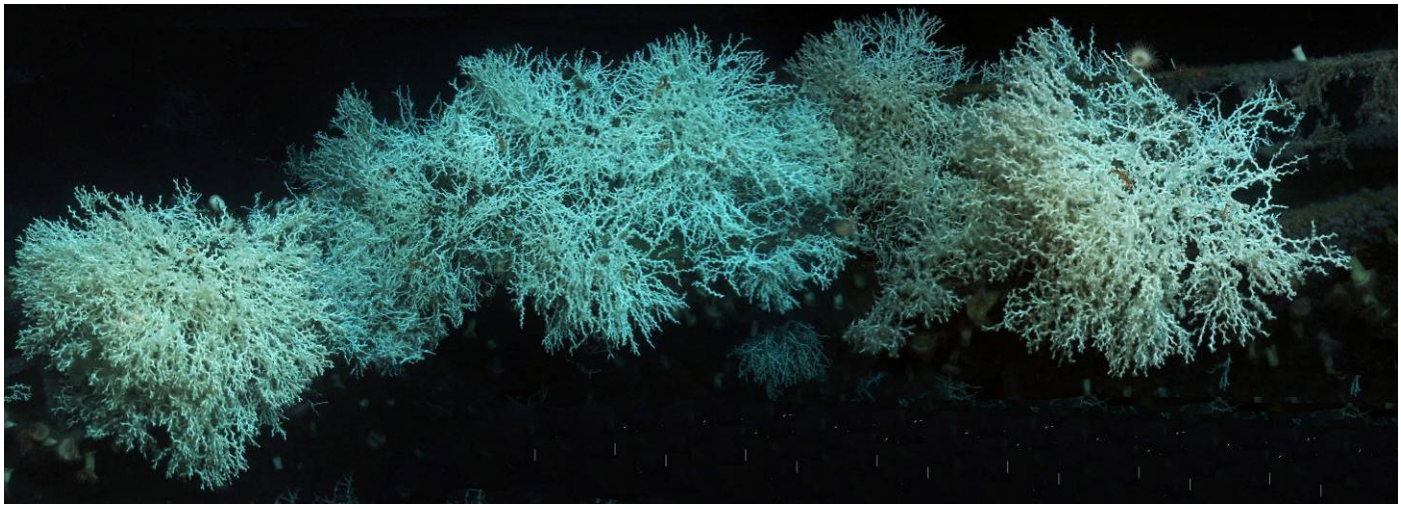
Deepwater Program: Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reefs, Rigs and Wrecks "*Lophelia* II"

Cruise 4 Report – RONALD H. BROWN – JASON II
13 October – 4 November 2010





August 2011

Deepwater Program:Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reefs, Rigs and Wrecks - "*Lophelia* II"

Cruise 4 Report

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U.S. Department of the Interior
BOEMRE
Gulf of Mexico OCS Region

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for

Deepwater Program: Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reefs, Rigs and Wrecks
Lophelia II

(Contract No. M08PC20038)

1 INTRODUCTION

OVERVIEW

This document represents TDI-Brooks' Cruise Report for the *Lophelia* II Project Cruise 4 for contract number: **M08PC20038**, issued by the U.S.Department of the Interior, BOEMRE "**Deepwater Program: Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reef, Rigs and Wrecks**. The cruise was completed on NOAA Ship *Ronald H. Brown* from 13 October – 4 November 2010. The cruise mobilized in Pensacola, Florida. One mid-cruise personnel transfer took place on 24 October. The cruise demobilized in Pensacola, Florida on 5 November 2010. This report provides detailed information regarding operational procedures, stations occupied, and sampling activity. Results reported were obtained by analysis of the sampling information and data during the cruise and immediately afterward. Results will possibly be revised. This report is a preliminary product of the contract.

REPORT CONTENT

This cruise report is comprised of seven sections and appendices.

The ***Introduction*** presents a brief overview of the program, including background and objectives.

Cruise Overview details the equipment and procedures employed during the cruise, participating organizations and personnel.

Operations – describes a brief overview of the sampling plan and descriptions of the equipment used to collect the samples during the cruise.

Education and Outreach – details methods of distributing the information collected during the cruise and incorporating into curricula for students.

Dive Plans provides a detailed description of activities planned for each site and dive. These are often modified during the cruise to accommodate changing conditions or information gathered.

Cruise Summary presents a chronological narrative for each day of the cruise. Noteworthy events are described and resolutions for any problems encountered.

The ***Site Summaries*** section provides a geological and biological description of each site with supporting images. The characterization of the site is augmented with figures of the dive track and events that were performed or noted.

BACKGROUND

Over the last half century, offshore exploration for hydrocarbons in the northern Gulf of Mexico has advanced from the bay and inner shelf to the continental slope-to-continental rise transition. Geophysical and geotechnical data collected in support of both exploration and production has been largely responsible for the foundation of our present understanding of slope geology. This database emphasizes the extremely complex geological framework of the northern Gulf's continental slope and the surprisingly important role that the expulsion of subsurface fluids and gases has on shaping surficial geology and biology of the modern seafloor. Regional topography of the slope consists of basins, knolls, ridges, and mounds derived from the dynamic adjustments of salt to the introduction of large volumes of sediment over long time scales. Superimposed on this underlying topography is a smaller class of mounds, flows, and hard grounds that are the products of the transport of fluidized sediment, mineral-rich formation fluids, and hydrocarbons to the present sediment-water interface. The geologic response to the expulsion process is related both to the products being transported and the rate at which they arrive at the seafloor. Mud volcanoes and mudflows are typical or rapid flux settings where fluidized sediment is involved. Slow flux settings are mineral-prone. Authigenic carbonate mounds, hard grounds, crusts, and nodules are common to settings where hydrocarbons are involved.

Recent manned submersible and ROV dives to the middle and lower continental slope confirm the existence of these hard substrates to the deepest parts of the slope. Direct observation and sampling of expulsion sites started in the mid-1980s on the upper slope. We now know from analysis of 3D-seismic data and submersible-ROV dives that numerous expulsion sites with hard substrates provide habitat for deep water corals exist over the slope's full depth range.

In the context of this study, deep hardground communities of the Gulf of Mexico comprise all of the biological communities inhabiting natural or artificial hard substrates, excluding the chemosynthetic seep communities. These communities consist of foundation species, those species that form large complex habitats at these sites, and their associated fauna ranging in size from large mobile fishes to microscopic meiofauna. The most prominent foundation species in these communities are the deep-water ("cold-water") corals. The terms "deep-water corals" or "cold-water corals" include relatives of the tropical reef-forming scleractinian corals, but also refer to a variety of other cnidarian taxa including antipatharians (black corals), gorgonians (including bamboo corals), alcyonaceans (soft corals), and stylasterine hydrocorals. Other taxa, including anemones and sponges are also significant contributors to the biogenic framework of these deep-water reef systems.

In the Gulf of Mexico, deep-water corals are commonly found on seep-related authigenic carbonates, but have also been observed on anthropogenic structures, ship wrecks and oil

platforms in particular. The most common species of reef-forming deep-water coral in the Gulf of Mexico (GoM) is *Lophelia pertusa* (=*prolifera*). This species was first recovered in the late 1800s by the *U.S. Coast Survey Steamer Blake.*

Increasing industry activity in deepwater has resulted in the creation of numerous platforms in water depths exceeding 300 m. In areas where hard substrates are limiting, these platforms may significantly increase the potential range of corals and other hardground fauna. Growth of *Lophelia pertusa* has been noted on the Pompano platform in VK 989. In addition, the Joliet platform in GC 184 near Bush Hill and the Neptune platform near the large *L. pertusa* site in VK 826 are very likely to host coral populations. This study will focus on the exploration and characterization of these communities and examination of their potential connection to other coral populations and surrounding deep-water communities.

OBJECTIVES OF THE PROJECT

A primary goal of this study is to obtain a robust predictive capability for the occurrence of rich cnidarian (primarily scleractinian coral) hard ground communities in the deep Gulf of Mexico. To achieve this long-term goal, this study will accomplish three interrelated and interdependent objectives:

1) Discover and describe new locations at greater than 300m depth in the GoM with extensive coral community development, particularly including *Lophelia pertusa*.

2) Gain a more comprehensive understanding of the fundamental processes that control the occurrence and distribution of *Lophelia* and other extensive coral communities at depths greater than 300 m in the GoM through both laboratory experiments and field data collection.

3) Document and understand the relations between coral communities on artificial and natural substrates with respect to community composition and function, phylogeographic and population genetics, and growth rates of the key cnidarian foundation fauna.

Upon meeting these three interrelated objectives we will have obtained an understanding of the biology and biogeography of *Lophelia* in the GoM that will result in a quantum increase on our ability to predict the occurrence of *Lophelia* at additional sites based on data such as bathymetry, current models, 3D seismic profiles, and known occurrence of source populations.

2 CRUISE OVERVIEW

The *Lophelia* II project involves exploration and research of the northern Gulf of Mexico deepwater natural and artificial hard bottom habitats with emphasis on coral communities with archeological studies of 4-6 shipwrecks. This cruise builds on information obtained from the first three *Lophelia* II cruises in September 2008, June 2009 and August 2009. Cruise 4 (this cruise) returned to known and new sites targeted by Cruises 1 - 3 for further exploration. An overview of the cruise is given in **Table 1**.

Table 1. Cruise Overview

NOAA Ship *Ronald H. Brown*
Cruise Number: RB-10-07
Project Deepwater Program: Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reefs, Rigs and Wrecks; *Lophelia* II
Cruise dates: 14 October – 4 November 2010
Working Area: The Northern Gulf of Mexico continental slope
Itinerary: Depart: **Pensacola**, FL,- **14 October;** Arrive: **Pensacola**, FL - **4 November**
Endorsements: CAPT Michael S. Devany, Commanding Officer, Marine Operations Center, Atlantic**,** Norfolk, VA 23510-1145
Chief Scientists: Dr. Charles R. Fisher, Penn State University, Department of Biology**,** State College PA16802 Dr. Erik Cordes, Temple University Department of Biology, Philadelphia, PA

All of the equipment for this expedition was loaded and installed onboard *Ronald H. Brown* in Pensacola, Florida prior to 14 October 2010.

This cruise employed the Remotely Operated Vehicle (ROV) **JASON II** to explore sites, make a variety of deployments and collections, and conduct a variety of studies on natural deep water coral reefs and deep water shipwrecks. This was a 22-day cruise with 17 ROV dives and an at-sea personnel transfer.

JASON II was used to: explore for the occurrence of deep water coral reefs; make collections of *Lophelia* and other corals for genetic and physiological studies, make collections of communities associated with *Lophelia* and other corals for ecological studies; collect quantitative digital imagery for characterization of sites and coral communities; collect spatially explicit physical near bottom oceanographic data; deploy cameras and microbial arrays; reposition larval traps and current meters; collect push cores; and conduct a series of linked archeological/ biological investigations on deep water shipwrecks. In addition to launching and recovering **JASON II**, elevators were deployed and recovered, moorings (larval traps, time-lapse camera and current meters) were recovered, and CTD casts were conducted.

PARTICIPATING ORGANIZATIONS

The following organizations (**Table 2**) were participants in Cruise 4.

Table 2. Cruise Participating Organizations

Penn State University (PSU)	Dept. of Biology, State College, PA 16802
Louisiana State University (LSU)	Geosciences Complex, Baton Rouge, LA 70803
Florida State University (FSU)	POB 3064326, Tallahassee, FL 32306
Temple University (TEMPLE)	Biology Department, 1900 N 12th St, Philadelphia PA 19122
Woods Hole Oceanographic Institution (WHOI)	National Deep Submergence Facility, Woods Hole Oceanographic Institution, Woods Hole, MA 02543-1050
US Geological Survey (USGS)	US Geological Survey, Florida Integrated Science Center, St. Petersburg, FL 33701
TDI-Brooks International	1902 Pinon Dr., College Station, TX 77845
BOEMRE	Gulf of Mexico OCS Region and Atlantic, New Orleans, LA 70123-2394
NOAA Office of Ocean Exploration and Research(NOAA OER)	NOAA Office of Ocean Exploration, 1315 East-West Highway, Silver Spring, MD 20910
C & C Technologies, Inc. (C & C)	730 E. Kaliste Saloom Rd., Lafayette, LA 70508
National Geographic	
Nature	
University of Mississippi	
University of South Florida (USF)	

PERSONNEL

The following persons (**Table 3**) were participants in Cruise 4.

Table 3. Cruise Participants

NAME	AFFIL.	POSITION
Dr. Erik Cordes	Temple	Chief scientist
Dr. Chuck Fisher	PSU	Chief scientist
Andrea Quattrini	Temple	Student
Jay Lunden	Temple	Student
Dr. Erin Becker	PSU	Scientist
Pen-Yuan Hsing	PSU	Student
Dannice Ruiz	PSU	Student
Dr. Ian MacDonald	FSU	Scientist
Tina Enderlein	PSU	Technician
Kate Stamler	PSU	Student
Dr. Tim Shank	WHOI	Scientist
Dr. Walter Cho	WHOI	Scientist
Dr. Cheryl Morrison	USGS	Scientist
Dr. Amanda Demopolous	USGS	Scientist
JanessyFrometa	USGS	Technician
Chris Cleaver	LSU	Scientist
Darren Depew	LSU	Scientist
Kody Kramer	BOEMRE	Scientist
Thomas Ryan	NOAA	Scientist
Sam Georgian	Temple	Student
Mark Shrope	Nature	Journalist
Katy Jones	Nat Geographic	Film crew
Chris King	Nat Geographic	Film crew
Dong Feng	LSU	Scientist
Dan Warren	C&C Tech	Scientist
Sheli Smith	C&C Tech	Scientist
Jack Irion	BOEMRE	Scientist
MichelaIngrassia	Univ Miss	Student

NAME	AFFIL.	POSITION
Brian DeSanti	FSU	Student
Lara Henry	USF	Student
Matt HeintzExped leader	WHOI	**JASON II** CREW
Scott Hansen	WHOI	**JASON II** CREW
AkelKevis-Stirling	WHOI	**JASON II** CREW
James Pelowski	WHOI	**JASON II** CREW
Ben Tradd	WHOI	**JASON II** CREW
Robert Waters	WHOI	**JASON II** CREW
Jason Kapit	WHOI	**JASON II** CREW
James Varnum	WHOI	**JASON II** CREW
Baxter Hutchinson	WHOI	**JASON II** CREW
Dara Scott	WHOI	**JASON II** CREW

3 OPERATIONS

SAMPLING

The primary data collected using the ROV included SM2000 multibeam, digital video and still photographic imagery, CTD with DO and pH sensors, geological samples, biological samples, archaeological material and push cores. Other data streams from the ROVs, such as vehicle attitude, acoustic data, and sonar imagery were recorded by networked computers in the control van. Navigational data for both the ship and ROV systems were also recorded. While in transit to and from the site, and during times when the ROV is not deployed, Seabeam multibeam bathymetric data were collected.

JASON II / MEDEA

JASON II/Medea is a remotely operated vehicle (ROV) system. It is a two-body ROV system, with *Medea* serving in a tether management role that decouples **JASON II** from surface motion (**Figure 1**). ***JASON II*** is connected to *Medea* by a neutrally buoyant tether that is 0.84" in diameter and approximately 35 meters long. Like the tow cable, it also uses three copper conductors and three single-mode optical fibers, but uses Spectra fibers to provide strength while reducing size and weight. The tether has a breaking strength of 41,000 lb. *Medea* weighs 1200 pounds in air and is maneuvered by controlling the surface ship's position within a dynamic positioning reference frame. Medea serves as a buffer between the ROV and the ship, and prevents the umbilical tether from tugging on the ROV as the ship rises and falls with sea state.

Medea also reduces the total load on the umbilical, which is the primary limiting factor in the operation of an ROV that dives to these depths. Medea is equipped with down-looking cameras. Both *Medea* (**Figure 2**) and ***JASON II*** (**Figure 3**) are designed to operate to a maximum depth of 6,500 meters (21,385 feet).

Figure 1. Illustration of *JASON II*/Medea (WHOI).

Figure 2. *Medea*, shown on deck (WHOI).

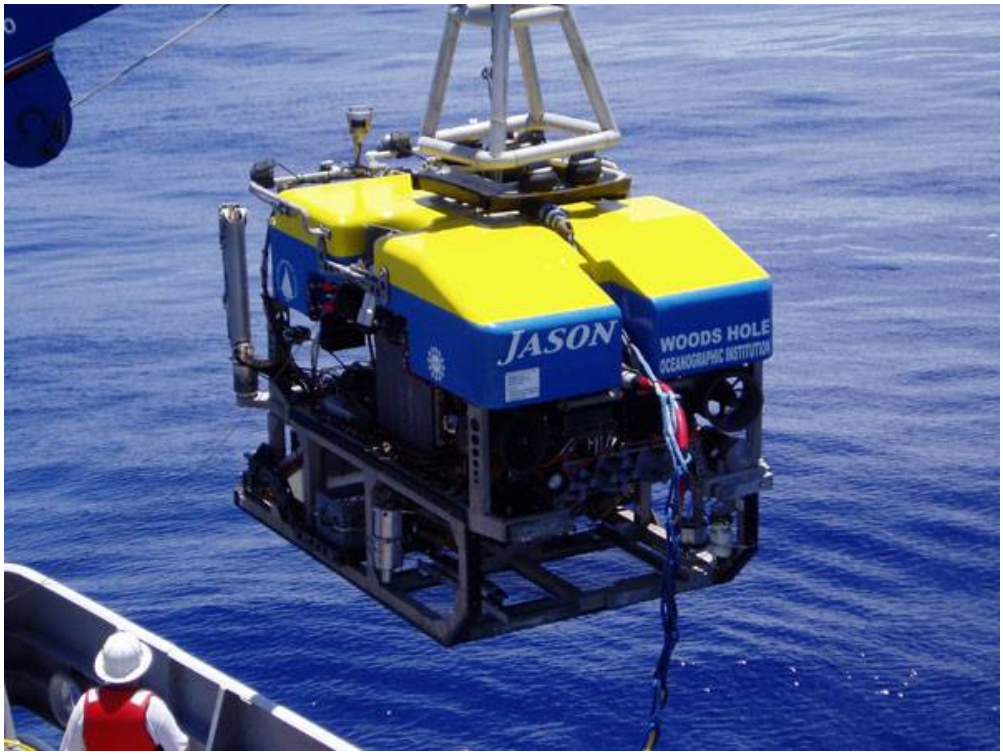

Figure 3. *JASON II* launch (WHOI).

Movements of the support ship maneuver *Medea* utilizing dynamic positioning. ***JASON II*** is propelled by six DC brushless electric thrusters that provide about 600 pounds thrust in the vertical, longitudinal and lateral directions. It weighs about 8,000 pounds in air but is neutrally buoyant at depth.

Both *Medea* and ***JASON II*** are real time optical imaging platforms with high quality cameras and lighting. *Medea* is configured with a silicon intensified target (SIT) black & white camera

for terrain identification and visual location of ***JASON II*** when both are operating. ***JASON II****'s* basket with custom sampling gear (**Figure 4**). Starting from the upper left corner and proceeding clockwise are 3 coral pot samplers, milk-crate of rubber stoppers to subdivide the genetic samplers, still camera on a swivel mount to provide forward looking and down looking capability, 10 core quivers capable of holding 20 discrete samples of multiple species in each, slurp sampler, 10 push cores.

Figure 4. *JASON II's* basket with custom sampling gear (see text).

Three people operate ***JASON II***. A **Pilot** "flies" the ROV. An **Engineer** monitors all the systems (electrical, mechanical, hydraulic, etc) and operates the winch which pays out / hauls in the fiber optic cable which is attached to *Medea.* A **Navigator** positions the research vessel so that *Medea* and ***JASON II*** can operate in the desired area. A fourth person is responsible for organizing all the data collected.

4 EDUCATION AND OUTREACH CRUISE SUMMARY

As with previous cruises, the *Lophelia II* Oct/Nov 2010 cruise was featured on the NOAA Ocean Explorer website (http://oceanexplorer.noaa.gov/welcome.html) as a "Signature Cruise" and was promoted through NOAA OE channels. During the cruise, log entries, seafloor and shipboard imagery and seafloor video clips were posted to the NOAA OE site on almost a daily basis. Various cruise participants again authored log entries as an opportunity to feature individual contributions to the overall research agenda. A Highlights "Best Of" Imagery and Video DVD was created and provided to NOAA OE. Due to the discovery of Deepwater Horizon oil spill damage towards the end of the cruise, press releases were drafted in collaboration with NOAA and BOEMRE, and findings from the cruise were featured on NPR, National Geographic, Nature and in the NYTimes.

During the cruise, the archaeological team again worked with a cohort of Ohio schools to incorporate aspects of the shipwreck research, ROV and AUV technology, and basic *Lophelia* biology into the schools' project-based learning curriculum on ROV design and development. Participating teachers accessed materials about the project through a Basecamp site that included Powerpoint presentations, a cruise blog, and other relevant literature. Participating students were encouraged to post questions and sent in Styrofoam cups to be "scrunched" as part of a study on pressure. Approximately 250 students participated.

In addition to providing "real-time" coverage of cruise events, the NOAA OE *Lophelia II* website has been incorporated into the project's problem-based curriculum: *Lophelia II Deep Sea Corals Unit.* The problem-based curriculum unit targets high school level students in biology or environmental science and references cruise logs, video and relevant multimedia modules to provide an authentic context for students. The curriculum also features a Student Challenge to locate potential Gulf of Mexico oil-drilling sites (using fictitious maps) that minimally impact *Lophelia* communities. In March-May 2011, the curriculum was tested by a small group of teachers and students in the Seattle School District. Feedback from teachers is currently being collected. A final lesson on ocean acidification is being developed.

5 DIVE PLANS

The following section contains the dive plans for each site (**Table 4**) executed during the cruise (**Figure 5**). Dive maps showing ***JASON II***'s track are presented as individual figures at each site in a later section.

Table 4. Sites characterized listed in chronological order

Date	Site	Dive Number	Lat DD_WGS84	Lon DD_WGS84
10/15/2011	VK826	J2-526	29.158444	-88.016242
10/16/2011	MC885	J2-527	28.066527	-89.713692
10/17/2011	GC246	J2-528	27.689721	-90.644962
10/18/2011	GC354	J2-529	27.597896	-91.826356
10/19/2011	GB299	J2-530	27.684991	-92.220535
10/20/2011	GB535	J2-531	27.421338	-93.595971
10/21/2011	GC140	J2-532	27.811076	-91.53722
10/22/2011	GC249	J2-533	27.737741	-90.521707
10/23/2011	VK906	J2-534	29.068903	-88.377581
10/24/2011				
10/25/2011	VK906/862	J2-535	29.068996	-88.376952
10/26/2011	MC751	J2-536	28.193494	-89.798639
10/27/2011	MC79	J2-537	28.161336	-89.752292
10/28/2011				
10/29/2011	MC118	J2-538	28.855867	-88.493561
10/30/2011	DC673	J2-539	28.310634	-87.307289
10/31/2011	VK826	J2-540	29.15462	-88.022582
11/1/2011				
11/2/2011	MC338	J2-541	28.675076	-88.481303

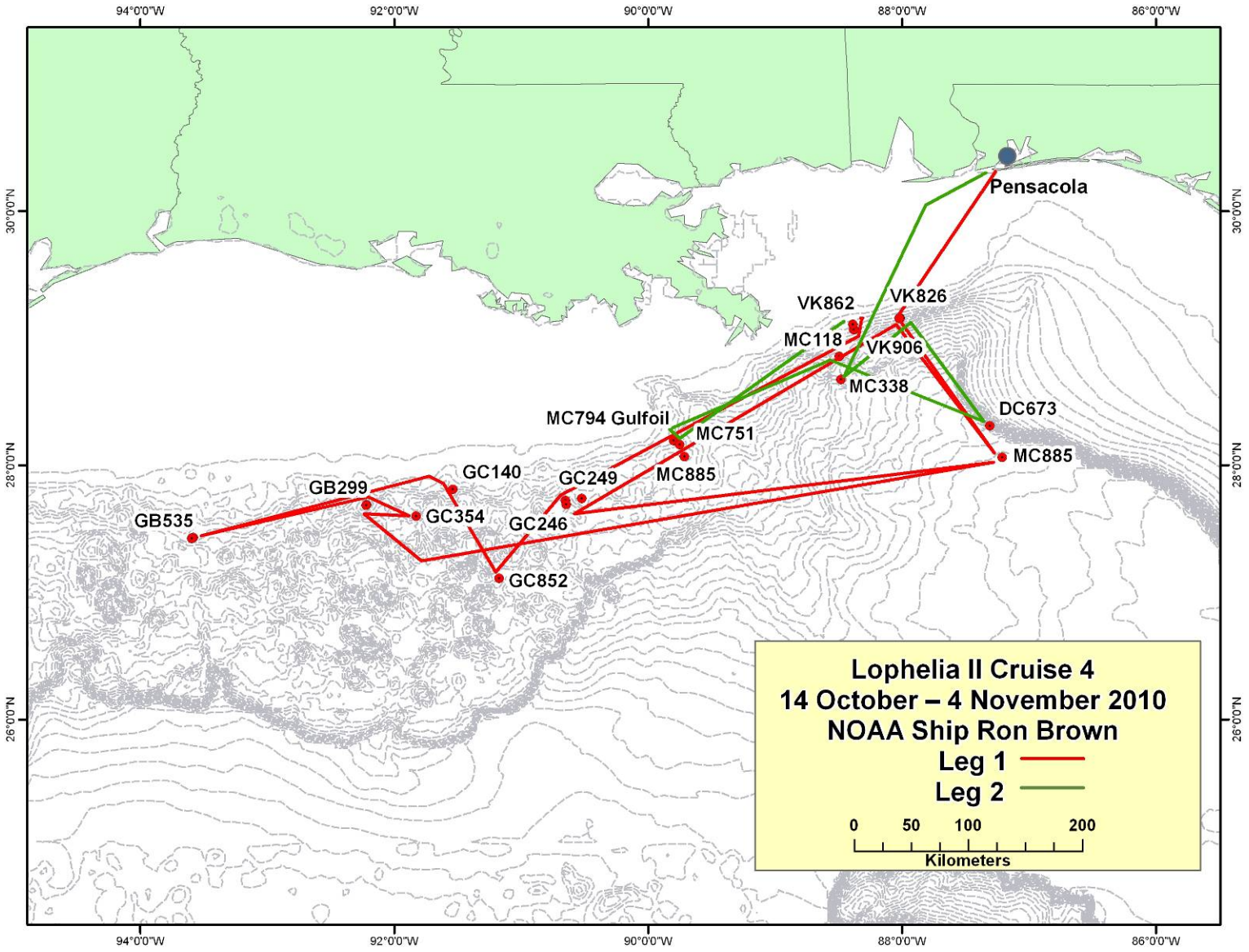

Figure 5. ***Lophelia*** **II Cruise 4 track of the RON BROWN.**

DIVE PLANS

1st JASON II lowering, 10/15/2010 J2-526 ***atVK826, 450 m***

This should be a 20 hour dive

Basket/vehicle loading:
CTD
7 niskin rack
DSC in downlooking mode:
    Parallel lasers and 2 strobes down
One biobox and 3 quivers on each swing arm
12 genetics quivers
milkcrate with 20 dividers and 20 stoppers
9 push cores
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Launch **JASON II** on T1 marker (**Erik**)
    Find and collect temp probe T1
    Fire a niskin
    Collect tubeworms into Timlater chamber if you see them down here
    If we are around a seep, take 3 seep cores (**Amanda**)
    If you don't take 3 background cores
2) Head for T2
    Genetics collections along the way (**Tim / Andrea / Cheryl**)
    Minimum of 2 white Leiopathes
    Minimum of 8 Callogorgia with brittles
        Drop a brittle in blender if they come off easy
    More Lophelia is gravy
    Other gorgonian species as they occur
    Small pieces of dead Lophelia from a variety of places/depths
3) When at a good spot where ALL target species occur, place one of each in Timlater chamber – flood the chamber when full-ish
4) When at a pretty Callogorgia/brittle spot, deploy a marker and try a forward-looking mosaic (**Erin Becker / Tim**)
5) Collect temp probe T2
    Fire a niskin
6) Head to Mosaic M
    When you get into Lophelia, collect into biobox on swingarm (**Jay / Lara**)
    Fill box from one location
7) Repeat mosaic M (**Erin / Pen**)
    Fire one of the Niskins
    Take 3 cores here (**Amanda**)
8) Head to Mosaic N

Continue genetics collections in between mosaics (**Tim / Andrea / Cheryl**)
Repeat mosaic site N (**Erin / Pen**)
Fire another Niskin
Take 3 cores here (**Amanda**)

9) If you haven't finished your genetics numbers yet, continue west and collect more (**Tim / Andrea / Cheryl**)
Fire a niskin
10) Fill other biobox with Lophelia from one location (**Jay / Lara**)
11) Transit to elevator
Fire a niskin along the way
Finish genetics collection along the way
12) Pick up elevator, move to Ian camera location (**Ian MacDonald**)
Place camera on elevator
Fire your last Niskin
Release elevator
Follow it up

2nd JASON II lowering, 10/16/2010 J2-527 ***at MC885, 650 m***

This should be a 12 hour dive

Basket/vehicle loading:
2 manipulators, no cutting tool
CTD
Slurp chambers
Niskin on manual release
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on port swing arm
9 Push cores and 3 quivers on stbd swing arm
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
1 mussel pot
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start on old mosaic site (**Erik**)
Find Madrepora site
Re-mosaic Madrepora (**Erin**)
Take 3 push cores (**Amanda**)

2) Take 2 hours to check out sonar targets between here and Geo #1 (2400-0200)

Sample 30 Callogorgia on the way (**Andrea**)
Sample Lophelia, gorgonians, Leiopathes as you see them.

3) If all co-occur somewhere, collect into RNAlater chamber
When you do this, also take 4 push cores (**Amanda**)
If you see some tubeworms – into blender
Ophiuroid into other blender

4) If you see something highly mussel potable:
Shoot a new mosaic (**Erin**)
Take a mussel pot (**Erin**)
Follow this with 3 push cores (**Amanda**)

5) 0200 – head north to Geo #2 target
Keep filling the quivers with target species

6) 0400 - continue further to the north to Geo #3 target

7) Leave bottom for 0800 recovery.

3rd JASON II lowering, 10/17/10 J2-528 ***at GC246, 820 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, no cutting tool
CTD
Slurp chambers
Niskin on manual release
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on port swing arm
9 Push cores and 3 quivers on stbd swing arm
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
1 mussel pot
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start at Geo #1 on the N flank of the mound (**Erik**)
2) Progress through Geo #2, 3, and 4 surveying the top of the mound.
Collect genetics samples along the way
Take good images before collections
3) If you locate something high-density:

mosaic (**Erin**)
mussel pot (**Erin**)
Take 3 push cores (**Amanda**)

4) If this mound isn't paying off by 2200, start over to Geo #5
You can leave earlier if there is really nothing

5) Head to #5 and then #6
When you get towards the top, chase sonar targets
Genetics collections at will
Find coral paradise up here somewhere

6) By 0100, have a look at #6 and decide if the top of the mound is worth a survey
If yes – set up for transects (**Ian**)
If not, continue to chase sonar targets on the crest of the mound,
While making you way over to Geo #7

7) When you locate something high-density:
mosaic (**Erin**)
mussel pot (**Erin**)
Take 3 push cores (**Amanda**)

8) If all target species co-occur somewhere, collect into RNAlater chamber
When you do this, also take 4 push cores (**Amanda**)
If you see some tubeworms – into blender
Ophiuroid into other blender
Decide whether to actually blend or not

9) If you see something highly mussel potable:
Shoot a new mosaic (**Erin**)
Take a mussel pot (**Erin**)
Follow this with 3 push cores (**Amanda**)

10) Leave bottom for 0800 recovery.

4th JASON II lowering, 10/18/10 J2-529 ***at GC354, 680 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators
Hydraulic ram for mussel pot
CTD
Slurp chambers
Niskin on manual release
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on port swing arm
9 Push cores and 3 quivers on stbd swing arm
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
1 mussel pot

2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start at Geo #1 at the base of the mound (**Erik**)
2) Spend 1hr looking around here for sonar targets
3) Could be carbonate blocks with tubeworms and gorgonians
    Collect genetics samples along the way
    Take good images before collections
4) If you locate something high-density:
    Mosaic (**Erin**)
    Mussel pot (**Erin**)
    Take 3 push cores (**Amanda**)
5) By 1800 hrs: Unless this is amazing, startup hill towards tubeworm target
    27°35.857N 91° 49.394W, 562 m
    Same plan for this – genetics along the way
    High-density is Erin/Amanda iteration…
6) When you get there, collect some tubeworms, gorgonians, look around…
7) By 2100 hrs: continue up to gorgonian/antipatharian area
    Make lots of genetics collections here
8) By 2400 hrs: head up to the Lophelia area
    Run transects
9) Keep you eye out for any markersdrop digital targets when you see them
10) Remosaic 2 sites from 2004/2005
    Mussel pot Lophelia
    Collect live corals?

5th JASON II lowering, 10/19/10 J2-530 ***atGB299, 350 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, one with cutting tool
Hydraulic ram for mussel pot
CTD
Slurp chambers
Niskin on manual release
DSC in downlooking mode:
    Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on both swing arms
9 Push cores on basket
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
2 Tim RNAlater chambers
2 blenders

Milk crate with RNAlater reservoirs

Dive plan:
1) Start at last year's best spot (**Erik**)
2) Place time-lapse camera in a good location (**Ian**)
    Drop a very good digital target here to mark the spot
3) Locate mosaic site at marker
    Collect Leiopathes along the way (**Dannise**)
    Re-mosaic same site (**Erin**)
    Take 3 push cores (**Amanda**)
4) Locate mosaic site at marker
    Collect Leiopathes along the way (**Dannise**)
    Re-mosaic same site (**Erin**)
    Take 3 push cores (**Amanda**)
5) Go to Geo point #2
    Collect Leiopathes, octocorals, associates, and Lophelia along the way (**Dannise, Tim, Cheryl, Andrea**)
    When you see Lophelia, fire the Niskin
6) Keep following the Geo trail to #3, #4, #5
    Collect EVERY Leiopathes in sight
    And get some other stuff too.
7) If you see at least 2 and preferably 3 of the target species in one place,
    Collect them into RNAlater
    Take 4 push cores (**Amanda**)
8) If you have more time, shoot a forward looking mosaic
    Pick a large Callogorgia or Leiopathes with good associates
    Deploy a marker
    Image thoroughly
8) YOU MUST RETURN TO WAY POINT #1 TO GET THE CAMERA BY 0630AM
    Take a look at where you are early in the AM and plan accordingly (**Erik**)

6th JASON II lowering, 10/20/10 J2-531 ***atGB535, 525 m***

This should be a 16 hour dive

Basket/vehicle loading:
Ian time lapse camera
2 manipulators, NO cutting tool
Hydraulic ram for mussel pot
CTD
7 Niskin rack
DSC in downlooking mode:
    Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on port swing arm
10 Push cores on stbd swing arm
mussel pot

12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start at Mosaic marker C (**Erik**)
    Place time lapse camera at first good spot (**Ian**)
        Fire a Niskin
    Locate and Re-mosaic marker C (**Erin**)
    Take a mussel pot here
        Fire a Niskin
    Take 3 push cores (**Amanda**)
2) Transit to mosaic marker E+F
    Collect some Lophelia samples in between (**Cheryl**)
        Can be at either marker, just make sure they are outside of mosaic
    Re-mosaic (down-looking) (**Erin**)
    Take 3 push cores (**Amanda**)
        Fire a niskin
3) Continue running along the ridge to the SE
    Chase sonar
    Occasionally take a look down the slope, and up on the flat
    Genetics sampling along the way
        Cheryl needs 17 Lophelia before you get too far
    Fill the biobox with live Lophelia before you get too far
4) As you reach each of the points on the map, fire a niskin
5) If you find a new Lophelia site beyond "Niskin #4"
    Take a new down-looking mosaic (**Erin**)
    Take 4 push cores if you haven't already (**Amanda**)
6) Keep exploring along the ridge
    Genetics collections along the way
    More Lophelia, Callogorgia, Leiopathes, gorgonian/ophiuroid div
    If you find the Trinity, or at least 2 of the species…
        Put them all in the RNALater chamber
7) AT 0330 hrs – TURN AROUND
    Run transects back along the ridge to Marker C (**Ian**)
8) YOU MUST BE BACK AT THE CAMERA AT 0630! (**Erik**)

7th JASON II lowering, 10/21/10 J2-532 ***atGC140, 360 m***

This should be a 16 hour dive

Basket/vehicle loading:
Ian time lapse camera

2 manipulators, cutting tool on stbd
Hydraulic ram for mussel pot
CTD
7 Niskin rack
DSC in downlooking mode:
    Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on stbd swing arm
10 Push cores on port swing arm
Mussel pot
Manual mussel pot ram on basket
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start at Geo #1 at the bottom of the hole (**Erik**)
    Have a look around, fire a niskin
2) quickly climb up to #2, then keep on to #3
    fire a niskin at #3
3) Between #3 and #4 – do a lot of Callogorgia/Leiopathes genetics(**Tim/Andrea/Dannise**)
    spend hours here if it is really dense
    shoot for 15-20 of each species
    fire a niskin up here
4) Make a decision around 2200.
    If you can't bear to leave this area
    alert Ian that transects happen here (300 x 200 m area)
    Mosaic over high-density Callogorgia (**Erin**)
    Fire a niskin
5) Forward mosaic a huge Leiopathes (**Erin**)
    Fire a niskin
    Push cores with each (**Amanda**)
    Run transects (**Ian**)
    Fire a niskin wherever you end up
    When transects complete, continue through as many points as you can
    BUT, if you are done here by 2200, continue on to #5
    Fire a niskin near #5
6) Continue to follow the path, chasing sonar targets
    Collect genetics samples along the way
    If there's not a lot going on, fire a niskin at each point along the way
    BUT – save one niskin for the end of the dive

    If these points are paying off, stay slow (0.4)
    If these are not working out, go faster (0.6) and see how many you can get to
7) Try to get to #8 by 2400, and head to #9

If you find a lot of Lophelia, or another great area
Alert Ian that he will run transects
Mosaic (**Erin**)
Mussel pot (**Erin**)
Push cores (**Amanda**)
Run transects (**Ian**)

8) Get to #9 by 0500 so we can see #10 and #11 by the end of the dive (**Erik**)

8th JASON II lowering, 10/22/10 J2-533 ***atGC249, 800 m***

This should be a 16 hour dive

Basket/vehicle loading:
Ian time lapse camera
2 manipulators, cutting tool on stbd
Hydraulic ram for mussel pot
CTD
7 Niskin rack
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on stbd swing arm
10 Push cores on basket
Mussel pot and 3 quivers on port swing arm
Manual mussel pot ram on basket
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Start at Geo #1 at the high reflectivity point on the side of the mound (**Erik**)
Take a little time here to have a look around, fire a niskin
Climb up to point #2 and chase sonar targets
Collect genetics samples along the way
Take good images before collections
2) If you locate something high-density:
Mosaic (**Erin**)
Mussel pot (**Erin**)
Take 3 push cores (**Amanda**)
If this is amazing, tell Ian that we are running transects here
Then repeat mosaic/mussel pot/push core
3) If it is just OK, keep going up to #2 then to #3, then #4, then #5
Out of targets?
We've got more from the multibeam or

Ask Kody to take a look at the seismic and pick more.
4) Repeat above instructions until it is time to come up.

9th JASON II lowering, 10/23/10 J2-534 ***at VK906, 380 m***

This should be a 32 hour dive

Basket/vehicle loading:
Ian time lapse camera
2 manipulators, cutting tool on stbd
Hydraulic ram for mussel pot
CTD
7 Niskin rack
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on each swing arm
10 Push cores on basket
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers
2 Tim RNAlater chambers
2 blenders
Milk crate with RNAlater reservoirs

Dive plan:
1) Dive on Mosaic marker L (mosL)
Set the time lapse camera down (**Ian**)
Re-mosaic this site (**Erin and Pen**)
Fire a niskin during mosaic (**Jay**)
Collect T1 – it should be right here somewhere
Take 5 push cores as close to the mosaic site as you can (**Amanda**)
Keep an eye out for a good spot while mosaicking
2) Head to Mosaic marker J
Along the way, stop and collect Lophelia
One piece into a quiver, same colony into biobox**(Jay / Cheryl**)
Do this two or three times
Re-mosaic this site (**Erin and Pen**)
Fire a niskin during mosaic (**Jay**)
Take 5 push cores as close to the mosaic site as you can (**Amanda**)
Keep an eye out for a good spot while mosaicking
3) Go over to T2 and collect this temperature probe
Along the way, stop and collect Lophelia
One piece into a quiver, same colony into biobox (**Jay / Cheryl**)
Do this two or three times
Do not stopper these if you can avoid it
4) Fire a niskin at exact niskin location on the map
Collect some Lophelia into the chamber pots here

Small pieces into the quivers at the same time
5) If you see large, mobile fauna – collect into swing arm quivers
6) Go to T3 and collect this temp probe
Along the way, stop and collect Lophelia
One piece into a quiver, same colony into biobox (**Jay / Cheryl**)
Do this two or three times
Fire a niskin
7) After T3, head back up towards mkr6 and cross over to mkr 4
Start Leiopathes collections (**Dannise**)
We are shooting for 13 white and 19 red, plus a few of other colors
Keep track of numbers of each color as you go
8) Also occasional Lophelia (biobox / quiver pairs)
9) At 0730 – head over to the sediment trap site
Right at 0800 – call the trap up and watch it go (**Tim**)
Go into lay-back mode 100 m off bottom during recovery
10) After you get the trap, come back down
Fire a niskin out here
Head for transect points and conduct survey (**Ian**)
11) After transects, go back to the tasks above wherever you left off.
12) When your Leiopathes numbers are looking good – go for a little run
Leave Roberts Reef and follow the little mounds to the W
Continue to follow to the NW
Then to the N towards the southern part of the main mound in 906/862
Collect Callogorgia/associates if you see it
If there is something else here, go ahead and collect it too
13) Need to be back at mosL site at 0300 on the 25th.
Head to Roberts Reef by 0200 if you are far away
Put a little Leiopathes on top of each biobox
14) Collect the time lapse camera
15) Come home

10th JASON II lowering, 10/25/10 J2-535 ***atVK906, 380 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd
CTD
7 Niskin rack
DSC in downlooking mode:
Parallel lasers, 2 strobes, HMI down
One biobox and 3 quivers on each swing arm
10 Push cores on basket
12 genetics quivers
Milkcrate with 20 big and 20 little stoppers

2 Tim RNA later chambers
2 blenders
Milk crate with RNA later reservoirs
2 markers

Dive plan:
1) Dive on Target Mosaic 1. There are two "mosaics" here that were not marked. We will try and locate them, if not then make new mosaics (**Pen/Tina, Chuck**)
2) Deploy a marker and do some horizontal imaging of colonies of leiopathes. Record heading and log as monitoring station. (**Pen**)
   If see other markers, near other good colonies, do same thing
   Collect some water samples (**Jay**)
      Collect 2-3 rocks (**Dong**)
3) Collect one lophelia and one Leiopathes into RNA later
      Collect 2 piecesof live Leiopathes
4) Come up off bottom and head N to waypoint TGT4 (about 3 km)
5) Move towards TGT 5 looking for corals main target is Callogorgia and associates,
6) Go the top of mound and areas worked for NRDA.
   Take remaining niskin samples (**Jay**)
   Find mosaic locations on top and redo. (**Pen**)
   Additional forward looking imaging with markers (logging as monitoring stations.)(**Pen**)
   Additional collections:
      Lophelia and Leiopathes in RNA later from 862
      Live leiopathes
      Rocks for Don
      3-5 samples of Lophelia live and dead

11th JASON II lowering, 10/26/10 J2-536 ***atMC 751, 440 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd. CTD
Remove niskin rack: Add single niskin
5 function Suction sampler
Mussel pot
DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward
One biobox and 3 quivers on one swing arm
Push cores on port swing arm
12 genetics quivers, milkcrate with 20 big and 20 little stoppers
2 Tim RNA later chambers and 2 blenders
4 markers

Dive plan:
1) Dive on H Marker. Re mosaic both H1 and H2: (**Pen/Chuck**)

Complement with horizontal frame grabs
Fire Niskin
Take Amanda pushcores: 3: (**Amanda**)

2) Move to marker G: remosaic: (**Pen/Tina**)
Complement with horizontal frame grabs
Take Amanda Pushcores: 3 (**Amanda**)

3) Go to another boulder with tubeworms and Lophelia mixed.
Use suction sampler extensively to get associated fauna and also collect a few tubeworms into biobox and one into blender. (**Chuck**)
Try a mussel pot here: (**Chuck**)
Take Amanda Pushcores: 4: (**Amanda**)
Make a live Lophelia collection into Stbdbiobox including dead ends of branches. (here or later) **(Jay/Brian**)

4) Move towards the North to make additional Lophelia collections (about 10) and include some dead parts as well. andCallogorgia (5) for genetics. If leiopathes is around here, then do the same (5-10). (**Andrea/Cheryl/Tim**)
Fix samples of Lophelia, Callogorgia and Leiopathes (and brittle stars), and tubeworms into RNA later. Try blending a starfish. (**Tim**)

5) As opportunity presents:
Deploy a marker and do some horizontal imaging of colonies of other gorgonians Record heading and log as monitoring station. (**Pen/Tim/Walter**)
Collect at least 4 rocks: (**Dong**)
Collect assorted gorgos and associates :(**Andrea/Tim/Walter**)

12th JASON II lowering, 10/27/10 J2-537 ***atGulf Oil, 600 m***

This should be a 28 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd. CTD
Single niskin
5 function Suction sampler
Mussel pot
DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward.
One biobox and 3 quivers on one swing arm
Push cores on port swing arm
12 genetics quivers, milkcrate with 20 big and 20 little stoppers
2 Tim RNA later chambers and 2 blenders
4 markers

Dive plan:
1) Dive on Debris field Starboard (west) of the wreck 28°09.640', 089°45.329'
Look around and determine source of debris?
Corals?

2) Move to bow of ship 28°09.617' 089°45.151'

Vertical Mosaic
Reconn: Circle of the ship [Bow/Portside/Transom/Starboard side]
Entanglements: Note entanglement hazards and areas of coral growth, etc on map
Decide which side to photomosaic
Set up as far from the ship while still getting sufficient lighting
First pass along the top edge of the ship. 30% overlap
Plan View Mosaic
Centerline run [remember both strobes on and laser]
Still Shots

- Bow
- Name
- Winch
- Hawse/anchor
- Plimsol marks
- On Deck
- Gun emplacements
- Shell casings
- Bridge
- Hull plating [welded or riveted]
- Torpedo damage
- Stern
- Transom
- Rudder
- Stern name plate

Drop Coral Colony Targets drop digital targets for coral colonies to measure for growth.
Still Shots: Return and gather stills of colonies to measure, assuring scale in images.
Lophelia Collection: collect small pieces from corals on the ground [10 samples for Lophelia genetics].
Slurp: crabs etc.
Push Cores: 4 push cores near coral growth as close to the ship as possible
Mussel pot collection [1 collection] at same location.

3) South Debris Field or East of Ship Bio Transects

Run transects. Need three (3) out and back. [3 m off seafloor with videos aimed forward; still aimed down on 15 second interval]
E/W Transects: If south debris field is rich -- run from amidship east – 3 lines

13th JASON II lowering, 10/29/10 J2-538 ***atMC 118, 880 m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd. CTD
Single niskin
5 function Suction sampler
2 Mussel pots

DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward
One biobox and 3 quivers on one swing arm
Push cores on port swing arm
12 genetics quivers, milkcrate with 20 big and 20 little stoppers
2 Tim RNA later chambers Remove the 2 RNA later blenders
4 markers

Dive plan:
1) This is an exploratory site for macro biology. Chase sonar targets as appropriate and explore.
   Many of the navigation targets are based on questionable navigation from JSL cruises and likely to be off.
2) Dive on N corner of site on CSA instrument: 88.49422, 28.85787
   Find instrument and check offset
3) Go to Tgt 2, PFA instrument and check offset
4) Go toTgt 3, Corals. ID, corals. Collect and/or log for long term obs if appropriate.
5) Go to Tgt 4, POD instrument and check offset
6) Go toTgt 5, Corals. ID, corals. Collect and/or log for long term obs if appropriate. There are large coral colonies here, chase on sonar and mark/document.
7) Go to Tgt 6, snails. ID and collect a sample if appropriate
   As you move south, be aware of Tgt7 (Mooring), a mooring coming off the sea floor 60 m.
8) Tgt 8 (Bioelc), 9 (Mrk 7), 10 (MRK 9), 11 (MRK 7) are instruments/markers and can be visited fornav purposes. If encountered, log locations.
   Madropora have been documented at Mad 1 and Mad 2 targets
   Gorgonians at Gorgo 1, 2, 3, 4
   These locations are from JSL navigation and are not very good. So use sonar and chase targets in these areas.
9) At two Madropora colonies:
   Mosaic
   Mussel pot in an edge and document for mosaic
   Take push cores
   If find good gorgonian stands,
   Establish horizontal monitoring sites with markers
   Take pieces if needed for genetics.
   There is also a big gas vent and iceworms on hydrates. Look for other seep fauna in these areas (tgt 13 Gas vent)

14th JASON II lowering, 10/30/10 J2-539 ***atDC673, 2600m***

This should be a 16 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd.
Remove CTD (only certified to 2000m)
Remove single niskin
Add Niskin rack

5 function Suction sampler
2 Mussel pots
DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward
Biobox and 3 quivers on each swing arm
Push cores on basket
REMOVE 12 genetics quivers,
Milkcrate with 7 big and 7 little stoppers
2 Tim RNA later chambers
4 markers

Dive plan:
1) This is an exploratory site for Deep water corals and seeps.
    Chase sonar targets as appropriate and explore.
    We will start at the base of the escarpment and explore up the wall.
    The three targets are expected hardgrounds.
2) Launch on the base of the escarpment 28° 18.590229'; -87° 8.639119'
    Chase sonar targets. The expectation here is seep fauna.
    Mussel pots are for mussels. If find tubeworms, suction associates and make a grab of tubies.
    If find a nice dense seep community, then mosaic.
3) Move up slope to 28° 8.693019'; -87° 8.266891'
    The hard grounds here show as a line from NW to SE. If searching, begin from this location and explore to SE. Expectation here is either seeps and/or bamboo corals.
    If seeps, then as above.
    If a dense aggregation of corals, then mosaic.
    If large colonies, horizontal observation station.
    Make collections as appropriate with snips or small whole colonies
4) Move up slope to 28° 8.775747'; -87° 8.03673' Expectation here is corals.
    Hard grounds here are also found along a NW to SW line.

15th JASON II lowering, 10/31/10 J2-540 ***At VK826, 450m***

This should be a 20 hour dive

Basket/vehicle loading:
2 manipulators, cutting tool on stbd.
Put CTD back on
Remove Niskin Rack
Add single Niskin
5 function Suction sampler
Remove 2 Mussel pots
DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward
Biobox and 3 quivers on each swing arm

Push cores on basket
Replace 12 genetics quivers,
Milkcrate with 20 big and 20 little stoppers
Put Girguis RNA later chambers back on. Do not need blender ability.
2 Tim RNA later chambers
2 markers

Dive Plan:
1) Launch **JASON II** on Mosaic Q marker (**Chuck**)
   Re-mosaic, fire niskin and pushcore (**Pen and Amanda**)
2) Transit to T3, looking for appropriate collections for genetics and RNA later along the way (**Chuck**)
   Collect T3
3) Transit to Mosaic O marker looking for appropriate collections for genetics and RNA later along the way (**Chuck**)
   Re-mosaic and pushcore (**Pen and Amanda**)
   Conduct transects over Beryx Reef (**Brian**)
   Begin collections of live lophelia into biobox and bottom of quivers, leaving open for addition of callo or leiopathes (**Jay, Cheryl**)
   Make slurp collections of shrimp and crabs for live transport to lab (Jay)
   Evaluate potential for appropriate Leiopathes&Callogorgia collections here (**Chuck et al**)
   Before midnight evaluate likely hood of 8 am recovery.

NOTE:
Over the course of this dive we need to complete all of the tasks below because this is our last dive with any of our core species:
Redo Mosaics O and Q, with associated pushcores.
Make a set of photo transects in Beryx Reef (Mosaic 0)
Make forward looking mosaics in a few appropriate areas with markers
(use Marker 3 and others on ROV)
Collect 3 callogorgia, 3 astroschema, 1 lophelia, 2 tubeworm heads, and 3 Leiopathes into RNA later
Collect 1 other callogorgia/Astro pair, 5 other Astro, and 20 other Leiopathes for Genetics
Collect at least 5 pieces of Leiopathes into biobox for live transport (need a total of 28 leio)
Collect Live Lophelia into a biobox (with subsample for genetics) from 10 colonies. Place one piece each into biobox and quiver.
1 Callogorgia and associates into a biobox with Lophelia for live study
Slurp a collection of shrimp and crabs for live study

16th JASON II lowering, 11/2/10 J2-541 ***At MC338, 1800 m***

Dive Until Done

Basket/vehicle loading:
2 manipulators, cutting tool on stbd.
CTD on batteries

Single Niskin
5 function Suction sampler
DSC in downlooking mode: New Parallel lasers, 2 strobes, HMI down
Old Lasers looking forward
Biobox and 3 quivers on each swing arm
Push cores on basket
12 genetics quivers,
Milkcrate with 15 big and 15 little stoppers
Remove Girguis RNA later chambers (blenders)
2 Tim RNA later chambers
5 markers

Dive Plan:
1) Launch **JASON II** on 88°28.05', 28°38.9'

Work up hill to local high at WP 1
Back down to WP2 the NW TO WP3
Work up hill to another local high at WP 4
Come back down to WP 5, then on to….. you guessed it: WP 6 then 7
This is an exploratory dive. Chase sonar targets through out. We are working along a ridge, venturing up to local highs along the way.
If we find an impressive community (seep or coral) ameniable to a down looking mosaic: do it.
Push core adjacent. (call Amanda)
If we find impressive massive corals, establish horizontal monitoring sites.
Push cores? (call Amanda)
Sample whatever we do find for taxonomy (corals and associates).
If find Lamellibrachia tubeworms, get enough for pop gen (30 individuals) and fix some in RNA later.
Push core? (Call Amanda)
We also want to make sure and take samples for NRDA: Push cores and animals with sufficient biomass: urchins, sponges, ophiuroids.
Added during dive (with dive extension of 4 hours and shortened turn-around time):

2) After running to WP7 work up slope and to the W to the ledge seen on the multibeam chasing sonar targets.
3) Run to WP,s 10,11, and 12 to NW chasing sonar targets.
4) Go to WP U-166 chasing sonar targets along the way. Wake the Archeology team.
5) Go to WP Robert E Lee
6) Added after finding corals: Additional search in this area and extended dive time "until done"

CRUISE SUMMARY

The following is a summary of the cruise activities and results. The sites are discussed in the chronological order visited. In some cases, later dives were made at the same site (**Table 4**).

Date	Activity
10/13	Scientists begin to arrive
10/14	Departure delayed from 1500 to 1700 in order for an agent from the American Bureau of Shipping to arrive at the ort and renew the ship's annual certification. The Ron Brown left the pier at 1700
	Before leaving port, the ship conducted a series of stress tests on the propulsion system since it had undergone significant repairs during port call in Pensacola. At approximately 1930 the ship was underway to the first site
10/15	Transit. Arriving on station (VK826) at 0200 hrs. At 0800 completed navigation survey and calibration of ultra-short baseline (USBL) navigation system by **JASON II** group
	0930 began recovery of two moorings deployed in 2009. Both acoustic releases indicated that they had released, but never sighted and the range to the beacon never declined below the water depth indicating that the mooring was likely to still be on the bottom. At 1130 sediment trap called up and it was secured and recovered at approximately 1200
	1500 **JASON II** launched at VK826 (**J2-526**) for 20 hr dive. A few issues with reconciling last year's navigation with this year's while transiting to T:1 waypoint. T:1 collected at 1530 and T:2 collected at 2045.
	Transit to Mosaic Marker M with genetic collections along the way. Finished Mosaic M at 05:47 and fired Niskin E moving to Mosaic Marker N finished Mosaic N at 07:03 and fired Niskin C. 0200 start to set up for a series of push cores near Mosaic N ship lost its dynamic positioning. 0300 recovered time-lapse camera deployed in 2009 at VK826 camera broke in a number of places as it was transition over to the elevator at 0330. Elevator released at 0430 and **JASON II** ascent began shortly after.
10/16	**JASON II** recovered at 0530 elevator recovered at 0645 start transit to VK862
	0830 recovered sediment trap at VK862 deployed in July 2010
	1000 transit to MC885 for next dive. 1800 arrive at MC885 lowered USBL pole and deployed CTD 1900 complete
	2000 **JASON II** launched at MC885**(J2-527)** for 12 hr dive
	Mosaics complete at 2230 set up for push cores associated with mosaic site U
	Dropped genetic marker #21 made a few coral collections near Geo target 1 at 0237
	JASON II on deck at 0800 begin transit to MC751
10/17	0900 recovery of sediment trap at MC751 deployed in 2009
	1000 transit to GC246
	1400 CTD cast at GC246
	JASON II launch on GC246 (**J2-528)** at 1600 at 16 hr dive
10/18	**JASON II** recovered 0800 start transit to GC354
	1400 CTD cast at GC354
	JASON II launch on GC354 **(J2-529)** at 1600 for 16 hr dive

	0240 deployed genetic marker #33 0350 sampled live *Lopheliaand Hoplostethus* fired single niskin at 0418 and deployed genetic marker #37
10/19	**JASON II** recovered at 0800 start transit to GB299
	1300 Single pass of multibeam over site GB299
	1400 CTD cast at GB299
	JASON II launch on GB299 **(J2-530)** at 1600 for 16 hr dive
	Completed re-photographing mosaic B at 0130 at 0200 located mosaic marker D and re-photographed mosaic D at 0240 mosaic D complete took 3 push core samples
10/20	**JASON II** recovered at 0800 start transit to GB535
	1400 CTD cast at GB535
	1600 launch **JASON II** at GB535 **(J2-531)**
	2221 re-photographed mosaic C and took push cores associated with mosaic C at 0049 found mosaic marker F and re-photographed mosaic F complete at 0052 moved over to repeat mosaic marker E only a few meters away from mosaic F
10/21	0730 recovered **JASON II** start transit to GC140
	Launch **JASON II** at 1700 site GC140 **(J2-532)**
	Between 0130 and 0300 series of genetics collections made focusing on *Leiopathes* and octocorals tether remained a problem as did the Doppler tracking the vehicles - experienced Doppler loss at times and would simply lurch and move forward
	Depoloyed mosaic marker W at 0545 for a down-looking mosaic
10/22	0800 recover **JASON II**, transit to GC852
	Recover current meter mooring at GC852 at 1200
	1400 CTD cast at GC852
	1500 depart GC852 transit to GC249 at 1900 multibeam survey of GC249
	2400 launch **JASON II** at GC249 **(J2-533)**
	Some *Callogoria* were sampled there was little else at the geo targets, so decision made to call the ROV up early at 1230 for a 1300 recovery to allow for an increased amount of time on the seafloor at VK906
10/23	1300 recover **JASON II** at GC249 start transit to VK906
	2000 launch **JASON II** at VK906 (**J2-534**)
	At 0210 re-photographed mosaic J and moved on to mosaic L at 0245 niskin B fired near mosaic L and completed a series of push cores associated with each mosaic
	0510 collected temperature probe (T1)
10/24	0800 recover sediment trap at VK906
10/25	0400 recover **JASON II**
	0700 meet **Southerner** for at-sea personnel transfer
	1000 heading back to station 1200 CTD cast at VK906
	1100 launch VK906/862 (**J2-535**)
	Deployed marker Y at unmarked mosaic site done in 2009 then set up to repeat this mosaic moved N about 10 meters and confirmed second mosaic site and deployed marker Z and set up to repeat this mosaic. Took niskin water sample at this location and completed push cores associated with both mosaics
	Repeated mosaic R at 1041 and repeated a portion of mosaic T at 1024 attempted to

	locate marker S twice with time running out completed two push cores associated with mosaic T
10/26	0745 recovered **JASON II** at 0800 began transit to MC751
	1600 launch **JASON II** at MC751 (**J2-536**) on coordinates of mosaic marker H – repeated mosaic H1 and H2 and did associated push cores with mosaic H
	0200 re-photographed mosaic G and did associated push cores
	Several meters away located large *Callogorgia / Asteroschema* community and deployed marker 41 and collected horizontal images for mosaicking noted "brown detrital-like debris" on the upper branches of this coral colony collected them for inspection and mosaicked the community
10/27	0800 recovered **JASON II** CTD rosette cast at 0830
	1000 began slow transit to Gulf Oil site
	1600 launch **JASON II** at Gulf Oil site (**J2-537**)
	Setting up on the starboard bow ran several mosaic test lines to determine the best way to approach the mosaic and fine tune the automatic image timer on **JASON II**'s HD camera system.
10/28	1200 **JASON II** recovered early due to storm front moving to the Brown at a high speed after recovery began transit to MC118
	1930 arrive at MC118 dive delayed until 0800 on Oct 29 ship preceded to multibeam the NRDA survey sites within 15 miles of the DWH.
10/29	0000 Multibeam of NRDA sites continued scheduled to finish by 1200. Decision made to delay dive until 1200. At 1200 dive postponed until 1600 due to high winds.
	1600 launched **JASON II** at MC118 (**J2-538**)
	Ole Miss Hydrate Observatory Site – more madrepora at this site than any other visited in the Gulf had a number of golden crabs
10/30	0800 recover **JASON II** head to new Desota Canyon site (80 miles away)
	1430 arrive at DC673 run multibeam W to E over station
	1620 launch **JASON II** at DC673 (**J2-539**) for 16 hr dive
	Bathymetry was not consistent between the 3D seismic map and the multibeam used as an underlay
10/31	0800 recover **JASON II** start transit to VK826 (60 miles away)
	1600 launch **JASON II** at VK 826 (**J2-540**)
	Last dive at site with the main organisms for laboratory study
	Re-photographed mosaic Q and O
11/1	2000 recover **JASON II** transit to MC338
11/2	0800 launch **JASON II** at MC338 (**J2-541**)
	Exploratory dive selected for survey as part of a NRDA effort
	Spotted recently dead or dying and stressed coral communities made some additional collections then deployed Marker AA for a detailed mosaic to determine the size of the site and approximate distribution of the corals.
	Arrived on U-166 site at 0600 local time proceeded to locate the microbiology coupon experiment on the mail hull remains as well as looking for evidence of fouling from DWH oil spill.
	Left U-166 and headed toward the passenger ship *Robert E. Lee* while in transit

	between the wreck sites **JASON II** experienced a loss of all power and decision was made to abort the dive immediately and prepare for a “dead vehicle” recovery.
11/3	**JASON II** recovered dead in water at 1045 local time
	0130 local time started slow transit to port
	1600 **JASON II** repaired insufficient time remained for productive dive and continued towards port for on time arrival the following morning.
11/4	0900 arrive Pensacola, FL at

6 DIVE SUMMARIES

The following section describes site characteristics biological observations and geological settings of the dive site locations visited during the cruise (see **Figure 5**). Dive maps showing **JASON II**'s track and sampling locations, as well as representative photographs, are presented as individual figures at each site. The dive sites are discussed in the chronological order visited, although later dives could have been made at the same site (see **Table 5-1**).

14-OCT: PENSACOLA, FL

1500: scheduled departure
1700: actual departure
1930: begin transit to first site

The ship was scheduled to leave port on slack tide at 1500 hrs. This was delayed in order for an agent from the American Bureau of Shipping to arrive at the port and renew the ship's annual certification. Once this was complete at approximately 1700, the Ron Brown left the pier.

Before leaving port, the ship conducted a series of stress tests on the propulsion system since it had undergone significant repairs during our port call in Pensacola. Once these tests were complete, the technician who was on board for these tests was dropped off, and the ship was underway to the first site at approximately 1930.

J2-526: VK826 – DIVE SUMMARY

VK 826 - 15-Oct:
0200: Arrival on station
0300: Elevator launch
0930: attempted current meter recovery
1130: sediment trap recovery
1500: JASON II launch

We arrived on station at approximately 0200 hrs. The first task was a calibration of the ultra-short baseline (USBL) navigation system by the **JASON II** group. The elevator was equipped with a USBL transponder and was launched at approximately 0300 hrs. The survey consisted of the ship moving to the four cardinal points of the compass centered around the USBL beacon and recoding the readings on the position of the beacon. This was complete at approximately 0800 hrs.

Following the navigation survey, at approximately 0930, we began the recovery of two moorings that were placed on the seafloor last year. The first attempt was on the current meter. The both of the acoustic releases indicated that they had released, but as the ship approached the position of the mooring from a variety of headings, it was never sighted and the range to the beacon never declined below the water depth. This indicated that the mooring was likely to still be on the bottom. The sediment trap was called up at 1130 and was spotted shortly thereafter. It was recovered at approximately 1200 and secured.

JASON II was ready to be deployed on lowering J2-526 at 1330 hrs over the position of the current meter mooring. Before the vehicle was launched, there was a sighting of what appeared to be the current meter floats. The small boat was launched at approximately 1345 and recovered the object, which turned out to be a beach ball. The small boat returned to the ship at 1400 and **JASON II** was launched at approximately 1500 hrs.

J2-526: VK826

JASON II dove on the site of the current meter and landed right on target (**Figure 6**). After trouble-shooting some navigation issues, the ship was brought into position and the mooring was barely touched by the manipulator and it released. The ship drove forward as the mooring ascended. It was quickly sighted and recovered with the small boat. Once it was on board again, at approximately 1615, **JASON II** remained in lay-back mode and the ship transited over to the T:2 waypoint.

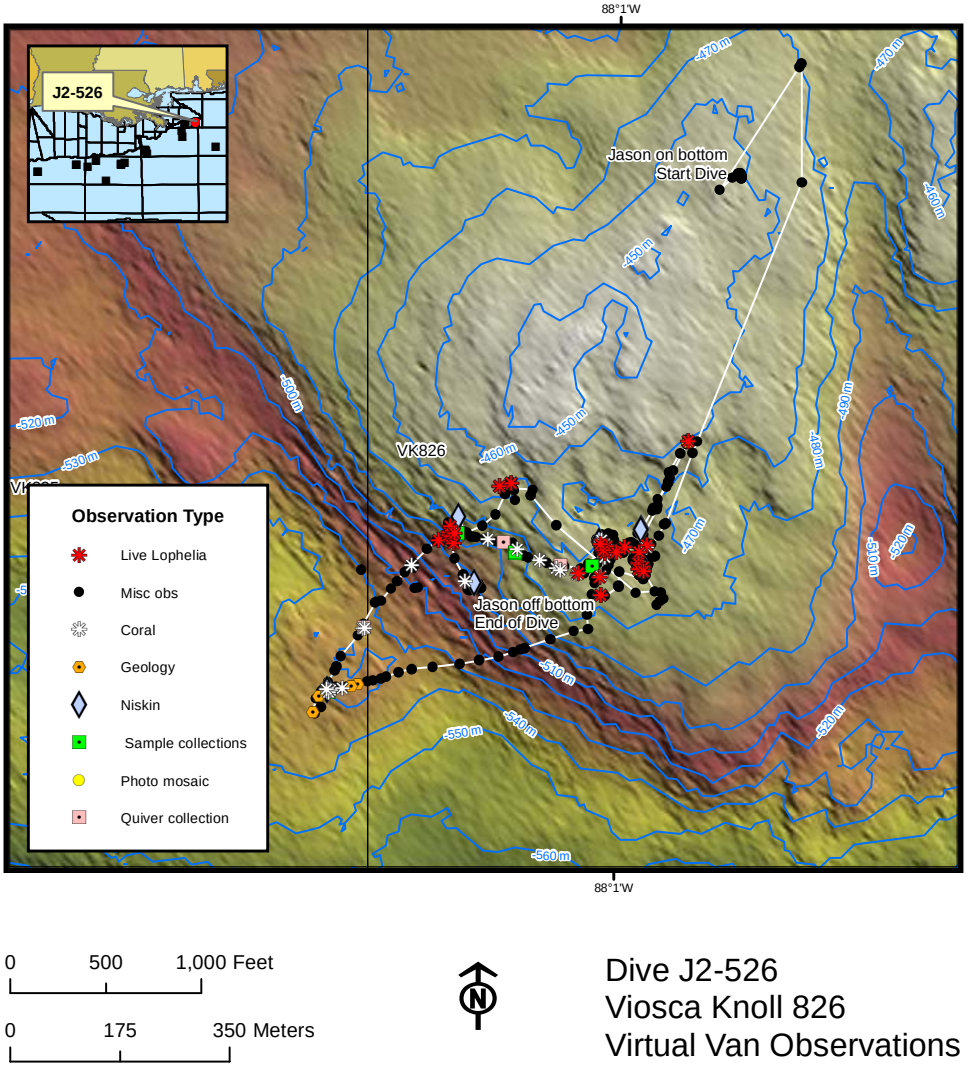

Figure 6. Events observed during lowering J2-526 at VK826 (inset)

There were a few issues with reconciling last year's navigation with this year's. While working through this, we transited over to the location marker T:1, found the physical marker, and collected the temperature probe at approximately 1530 hrs. We then proceeded north towards marker T:2. Along the way, the new cutting tool was used to collect a few black coral samples. A tubeworm was also collected into the RNA blender device. After searching for the marker T:2 at the approximate position of the marker from last year, it was finally found and collected at 2045 hrs.

After locating the T2 temperature probe and placing it on the basket, we collected several branches of live *L. pertusa* from the colony that was adjacent to the temperature probe. This sample was placed in the Port Biobox. We noted at this time that there was a school of hyperiid amphipods (*Phronima* sp.) in their salp housings. We then began to transit north-northwest towards Mosaic Marker M; however, some issues arose with Medea as it began to spin slowly for 20- 30 min. After this issue was solved, we made a few genetics collections, including an orange *Leiopathes* and *L. pertusa*into Quiver 8. We also filled an RNA chamber with 2 *Leiopathes* colonies (orange morphs) and branches from 2 *L. pertusa*colonies. This RNA chamber was pumped with RNALater when we were finished collecting. For the next 1-1.5 hours, we looked for the Mosaic Marker M. There were issues with the correct Marker Location (on our end) and the ship's navigation. During this time, we observed only orange and red color morphs of *Leiopathes* and both live and dead *L. pertusa* colonies (**Figure 7**). Few mobile megafauna were observed, including a few blackbelly rosefish, tinselfish, *Echinus* urchins, and *E. picta.*

Following the genetics collections, we found marker M and began the first mosaic around 2400 hrs. We located mosaic Marker M (29º 9.487026 N, 88º 1.012206 W) after searching around the nav target in an area with dense live and dead Lophelia. The mosaic is in an area where the clumps of Lophelia become more patchy surrounded by areas of mud (**Figure 8**). When we located the marker, it was becoming difficult to see because it is heavily encrusted by animals. We took some time to play around with the strobes and camera settings. The F-stop and shutter speed on the camera can only be changed using the GUI on the engineer's computer. We photographed mosaic M at 4.5m altitude and ½ zoom. After finishing mosaic M (05:47), we fired Niskin E and moved on to the target for mosaic Marker N. Marker N was much easier to find (29º 9.461088 N, 88º 0.972018) and the marker remained clean of fouling organisms. This mosaic is in an area with many disarticulated clam shells and small patches of Lophelia. We photographed this mosaic at an altitude of 4 m and about 1/3 zoom (06:17). Some lines had to be repeated after more fiddling with the camera settings. We completed the mosaic at 07:03 and fired Niskin C. From the same heading from which the mosaic was photographed, the **JASON II** backed up until just outside the mosaic area and settled down to take sediment cores cores.

Once the mosaics were complete, at approximately 0200, we set up to take a series of push cores near the mosaic site. At this point, the ship lost its dynamic positioning, and **JASON II** was dragged off site. When DP was functional again, we had to move onto the recovery of the time-lapse camera that was deployed at this site last year. **JASON II** transited over to the camera site and it was quickly located at approximately 0300. When it was picked up off the seafloor, the handle broke off on one side and it was delicately placed onto the basket. **JASON II** transited over to the elevator and began to place the camera on the elevator at 0330. The camera system

continued to break in a number of places and all of the pieces were placed into the box on the elevator. The elevator was released at 0430 and **JASON II** began its ascent shortly afterward.

Figure 7. Two tubeworm species, *Lamellibrachia luymesi* and *Seepiophila jonesi*, in a small aggregation on an authigenic carbonate.

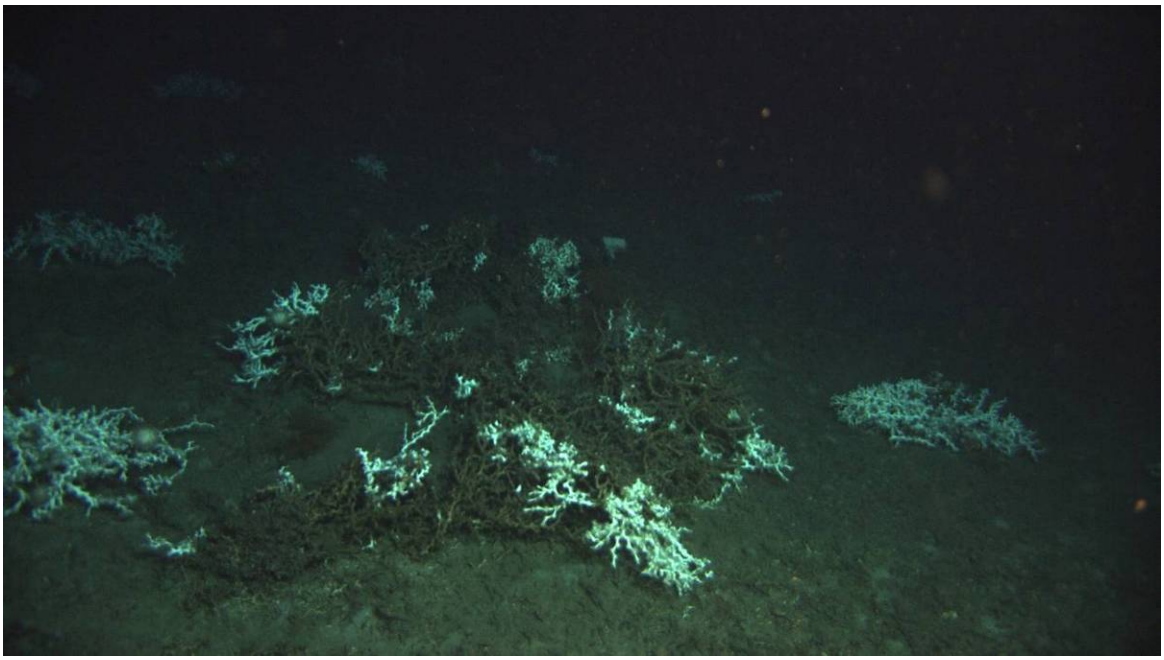

Figure 8. *Echinus* urchins move through a relatively sparse field of live and dead *Lophelia pertusa* (VK826).

J2-527: MC885 – DIVE SUMMARY

16-Oct: VK826, VK862, MC885
0530: JASON II recovery
0645: elevator recovery, transit to VK862
0830: sediment trap recovery at VK862
1000: transit to MC885
1800: CTD cast at MC885
2000: JASON II launch

JASON II was recovered first at approximately 0530. The elevator was recovered on the third attempt at approximately 0645. We then made the short transit over to VK862 to recover the sediment trap that was deployed on the NRDA Nancy Foster cruise in July. We were on station at approximately 0830 hrs and the sediment trap was released. It was spotted on the surface at 0900 but the ship lost thruster control. The sediment trap was recovered at approximately 1000. We then began the transit to Mississippi Canyon 885 for the next dive.

We arrived at MC885 at approximately 1800 and set up to make a CTD cast. We went to the **JASON II** dive site, lowered the USBL pole and then deployed the CTD over the side. The cast was complete at approximately 1900. **JASON II** was launched at MC 885 at 2000.

J2-527: MC885

JASON II reached bottom at 650 m depth at approximately 2030 hrs. As we began to transit (**Figure 9**) to the location of one of our markers from the Lophelia I project in 2004 we quickly came across a group of small boulders with *Callogorgia* and ophiuroids (**Figure 10**). We stopped to take a series of genetics samples at approximately 2100 hrs. We collected 4 sets of Callogorgia and associates as well as *Lophelia* (**Figure 11**), and a carbonate sample with solitary corals into the biobox.

We continued on towards the marker 4 site and began to survey the area for the Madrepora colony that was mosaicked in 2005. At approximately 2130 hrs we came across a series of boulders with Madrepora on them next to a large float (FF) and a series of small PVC sediment traps that were deployed in 2004. We decided to obtain two mosaics over Madrepora at this site, on the off chance that either of them was the same Madrepora colony that was previously imaged. We also took some down-looking pictures of the sediment traps, but decided not to collect them since they were originally deployed with mercuric chloride inside and we had no way of sealing the tops to prevent this from coming out or from the flushing of the traps at the surface.

The mosaics were complete at 2230 hrs and we set up to take a series of push cores associated with the mosaic site. From 2256-2303 hrs, four push cores were collected < 0.5 m apart, in close proximity to Mosaic U, at 633 m depth. Three of the four sediment cores were collected for macro and meiofaunal community analysis, while the forth core was obtained for particle size, total organic carbon and nitrogen, and hydrocarbon analyses.

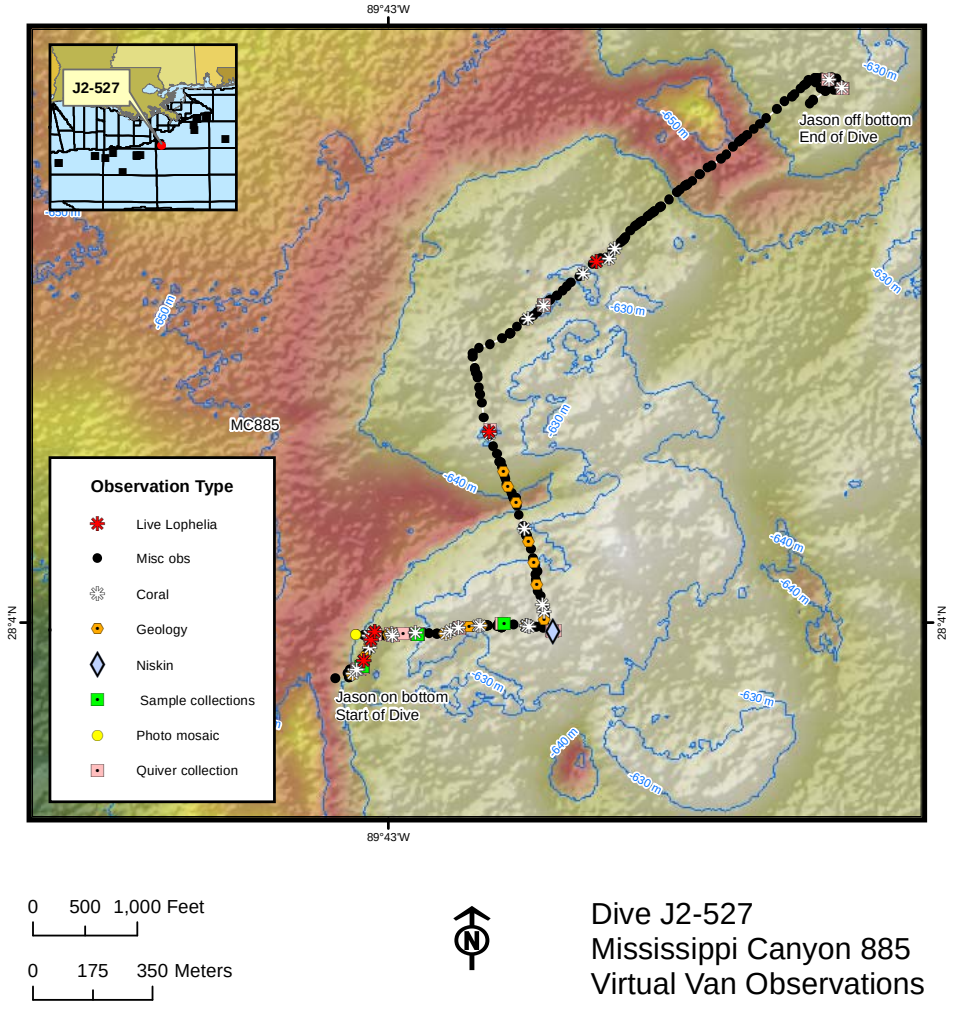

Figure 9. Events observed during lowering J2-527 at MC885 (inset)

After the push core collections, we preserved corals at depth in the RNA chamber. At 2315 CDT, *Callogorgia Americana* with an ophiuroid and *L. pertusa*polyps were added to the RNA chamber. Following this collection, we moved from the general area of the mosaic site towards Geo point #1 at 2330. The next 3hours were spent transiting towards marker Geo point #1 and collecting *Callogorgia americana* with associates along the way. 3-4 coral and associate samples were collected every 50-70 m, and we dropped genetic markers at these sites. Most coral colonies had associated catshark egg cases, several of which were also collected. In addition, we put on *Astroschema*sp. in one RNA blender and a tubeworm in another. We noted that this took a significant amount of time, and did not blend the specimen completely. We arrived at Geo target 1 at ca. 0237. We dropped the genetic marker #21 and made a few coral collections. At ca. 0300, we moved towards Geo point #2.

Figure 10. A few brittle stars settle on *Callogorgia* sp. colonies with the tubeworm *Lamellibrachia luymesi* in the foreground (MC885).

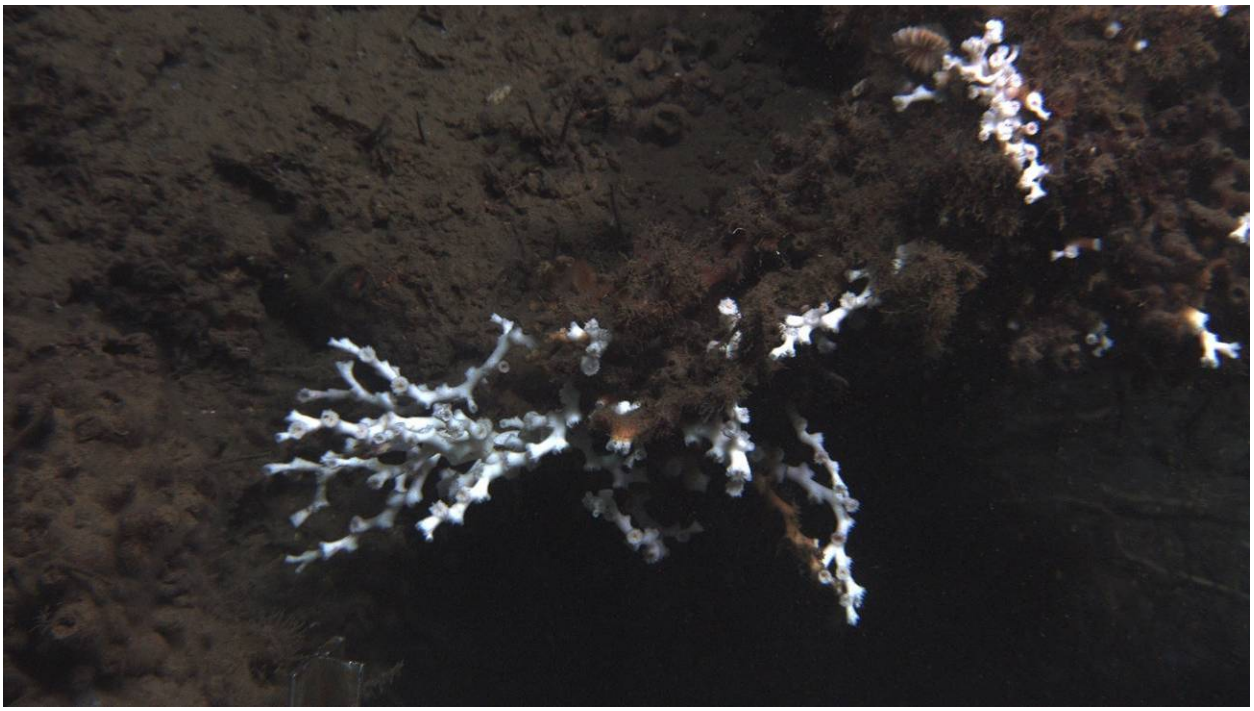

Figure 11. A close-up view of dead and live *Lophelia pertusa* with a single cup coral seen in the background (MC885).

We arrived at Geo point #2 at approximately 0430 hrs. There was very little surface expression associated with this target, except for a few observations of white, seep-related sediment and small bacterial mats. As we continued on towards Geo #3 at approximately 0500 we went into a small bathymetric low between the targets. This consisted of plain mud. As we began to ascend once again towards Geo #3, we saw a small carbonate with Callogorgia and ophiuroids on it and we sat down and collected it into the last open quiver on the basket. As we continued on, we began to see seep sediment once again and a bed of what appeared to be live clams was observed. These continued as we approached Geo #3 and may be the cause of the seismic anomaly at this site. After passing over Geo #3, we found another small outcrop with Callogorgia and settled down to sample it.

Once this sample was secured in the quiver on the starboard swing arm, we spent a few minutes scouting around the area, but the hydraulic leak in the port arm was resulting in a very low reservoir of hydraulic fluid. At approximately 0700, the biobox was moved to the basket and secured for recovery. We began recovery of **JASON II** at 0720, and it was on deck by 0800.

J2-528: GC246 - DIVE SUMMARY

17-Oct: MC885, MC751, GC246

0800: recovery of JASON II, transit to MC751
0900: recovery of sediment trap at MC751
1000: transit to GC246
1400: CTD cast at GC246

1600: launch JASON II

At 0900, we arrived at MC-751 to recover the sediment trap that was deployed last year on the Lophelia II cruise. The trap was released and was quickly spotted on the surface. The collection of the trap went smoothly and it was secured on deck and we were underway to GC246 by 1000 hrs. We arrived at GC246 at approximately 1400 hrs. We lowered the USBL pole into the water and then deployed the CTD for a water column cast. After this was complete, we launched **JASON II** at the same position at 1600 hrs.

The next series of dives are all on a 1600 hrs launch and 0800 recovery, and the **JASON II** team has agreed to do a series of 8 hour turn-arounds if the deck interval is during the day and we keep on this schedule for at least 4 days. They have switched to three 5-hour shifts instead of 4 4-hour shifts for the duration of this schedule. (Note: after a few days of this, all of the pilots seemed to agree that they like this mode of operation.)

J2-528: GC246

We launched **JASON II** on the edge of the highest amplitude target at 1600 hrs. On the bottom, a hard ground in the starboard manipulator was detected and it was secured. Our survey began around the northern edge of the mound (**Figure 12**) where some seep sediment and a few shell hash beds were noted. An area of reduced sediment with white bacterial mats and a few live mussels was noted. At 1700 we sat down to collect some of the mussels into the RNAlater chamber to get a confirmed ID. There were a number of these small patches of seep sediment on this northern flank of the mound.

We proceeded to Geo target #2, but had some difficulty with the ship holding position or responding to the controls in the **JASON II** van. After some trouble-shooting and a heading change, we decided to head directly for Geo target #4 at the crest of the local bathymetric high. There were a few recent flow features of extremely smooth sediment, but fewer distinct seep features and no other organisms visible on the surface. We then began our transit over to the ridge on the northern end of the regional bathymetric high from the multibeam. There were few organisms on the way, with the exception of a number of swimming sea cucumbers. There was more bathymetric relief in this area, in some cases with near vertical sediment features. When we arrived at Geo #5, we stopped to collect a few sea cucumbers into the slurp chamber while the **JASON II** pilots went to set up a hose on the winch, which was showing high temperature readings.

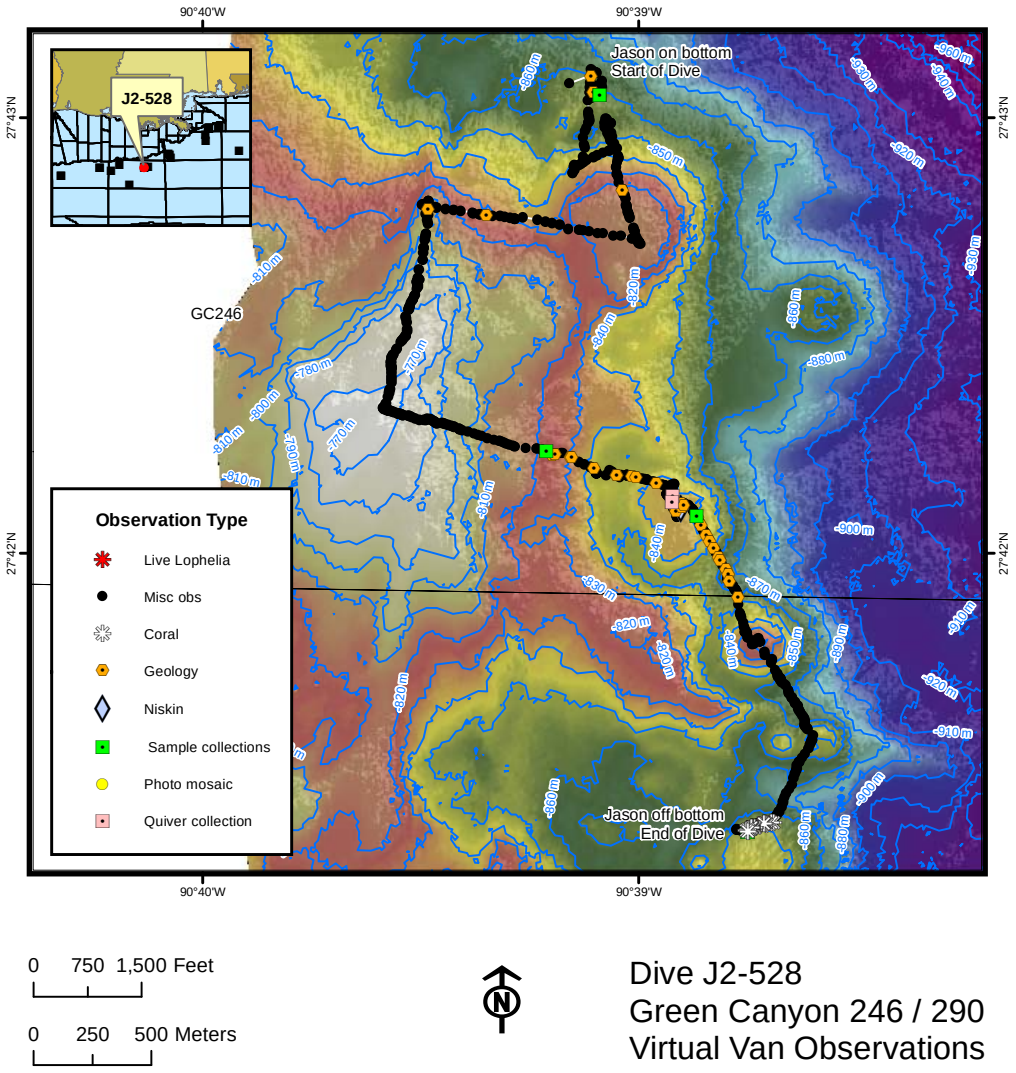

Figure 12. Events observed during lowering J2-528 at GC246 (inset)

At approximately 2100 hrs, we began to transit south along the ridge towards Geo target #6, the distinct bathymetric high of approximately 770m in the multibeam and the seismic line through the mound. The crest of the hill was relatively barren of life, with an occasional sea cucumber or crab. The seafloor was mottled, grey mud, with fish burrows scattered randomly. We next transited down the steep hillside to Geo target #7, approximately 950m away. Target #7 was an abrupt plateau, about three to four acres in size. In the center of the plateau we located an area of live mussels (**Figure 13**), arranged in distinct clumps of six to seven, with hundreds of snails coving the area. Vertical coned features of extinct brine seeps were also present, about five inches in height, and we slurped some snails off their peaks. We also collected three push-cores of seepy sediment around the cones, and collected a mussel pot. Upon letting the sediment settle, we collected a water sample above the mussel bed with the niskin.

Figure 13. A dense field of dead *Bathymodiolus* mussels with disarticulated shells (GC246).

Moving towards the south of the plateau, we discovered many active brine seep vents, barren of life in the area (**Figure 14**), and decided to follow a prominent brine flow uphill to its source. We discovered the source to be a massive brine lake, approximately six to ten inches deep, rimed with mussel shells, with active brine seeps in its center. Also in the center of the pool was a deceased isopod, which we collected and sat on the **JASON II**'s tray. We sat down in the pool and brine waves propagated outward, lapping its shoreline.

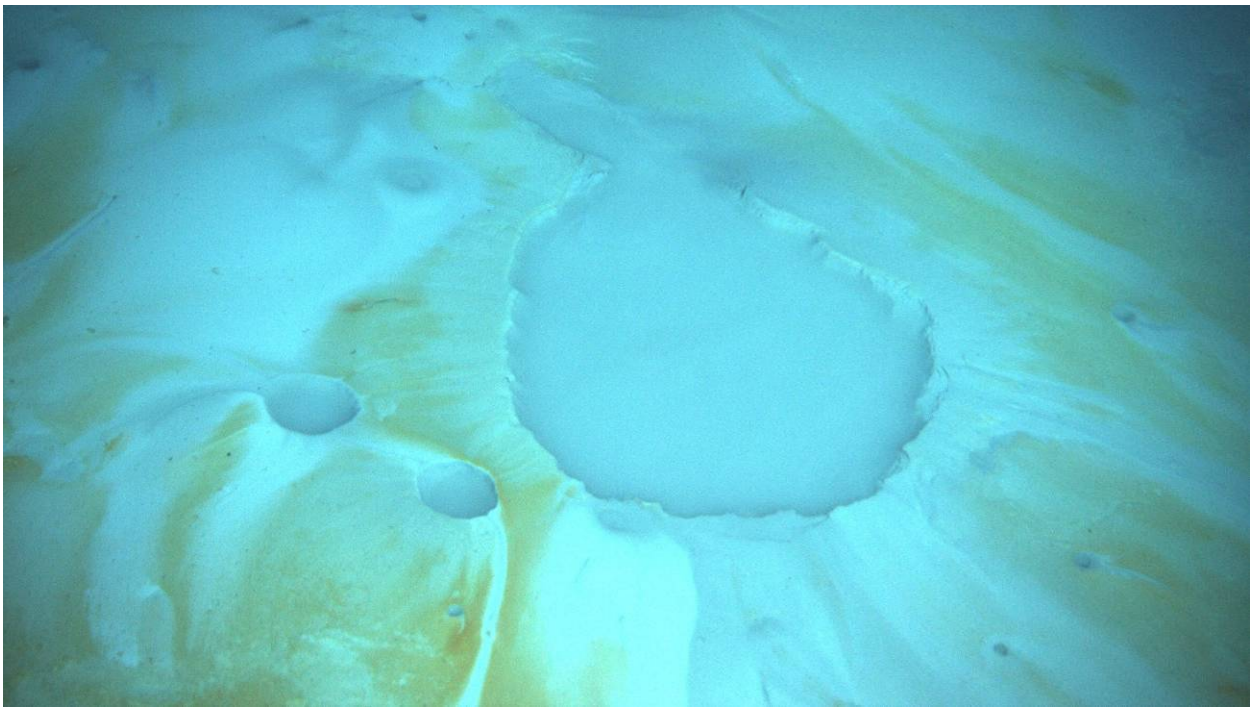

Figure 14. Active mud flows and small, uncolonized brine pools (GC246).

We next proceeded south one kilometer to Geo target #8, a skyscraper sized mud volcano. The steep flanks were exceptionally barren of life, but we did collect a solitary sea star. The peak of the volcano was active with fresh mudflows, however not during this particular visit, and few small fish present. We descended the volcano on its southern side and proceeded south 600m to Geo target #9, an area with locally high relief.

The seafloor to target 9 was again mottled mud, with larger, inhabited fish burrows. We continued to approach the final Geo target and came across a small trench on the slope of the mound. On the edge of this trench, there were a series of small exposed carbonates that were inhabited by Callogorgia and symbiotic ophiuroids. Between 0530 and 0730, a series of 6 paired samples were collected into the quivers and into the RNAlater chambers. **JASON II** left bottom at approximately 0730 for an 0800 recovery.

J2-529: GC354 - DIVE SUMMARY

18-Oct: GC246, GC354

0800: recovery of JASON II, transit to GC354
1400: CTD cast at GC354 1600: launch JASON II

During ascent, the ground fault that disabled the starboard manipulator disappeared. Upon recovery of the vehicle, no problems were apparent. The electrical connectors were cleaned and reattached in the hopes that this would solve the problem. We recovered **JASON II**, handed the giant isopod around for everyone to take pictures with it, and headed to GC354. The CTD cast went smoothly and **JASON II** was launched at 1600 hrs.

J2-529: GC354

We began the dive on a deeper part of the site that we had not previously explored. We spent the first ~ 1hr of the dive examining the base of the slope that had been visited before (**Figure 15**). There were a few outcropping carbonates in this area, and a few tubeworms around the base of the carbonates. As we proceeded upslope, a few species of gorgonians (including *Acanthagorgia* sp. and *Nicella* sp.) were observed (**Figure 16)**and collected in this area at approximately 2215, followed by a few black corals. Outcrops increased in number and size (by 2300) when these antipatharians and bamboos were collected (including Stichopathes with a "candyland" ophiuroids and *Paracalyptophora*). We then at 2325 collected five tubeworms and placed them into one of the RNALater chambers and flushed- depth was 567m. We arrived and surveyed the outcrop area around ball marker #2 at 0012 (566m) Lat 27° 35.87 N Lon:91° 49.38W. Sediments proximal to a tubeworm colony were sampled via push cores. Once the deeper portion of the site was explored, we tried to relocate some of the markers left at the tubeworm collection sites in 2003. By moving west exploring sonar targets proceeded west and sighted old (v-shaped) Marker 6 on a low relief outcrop with old tubeworms at the base (0047).

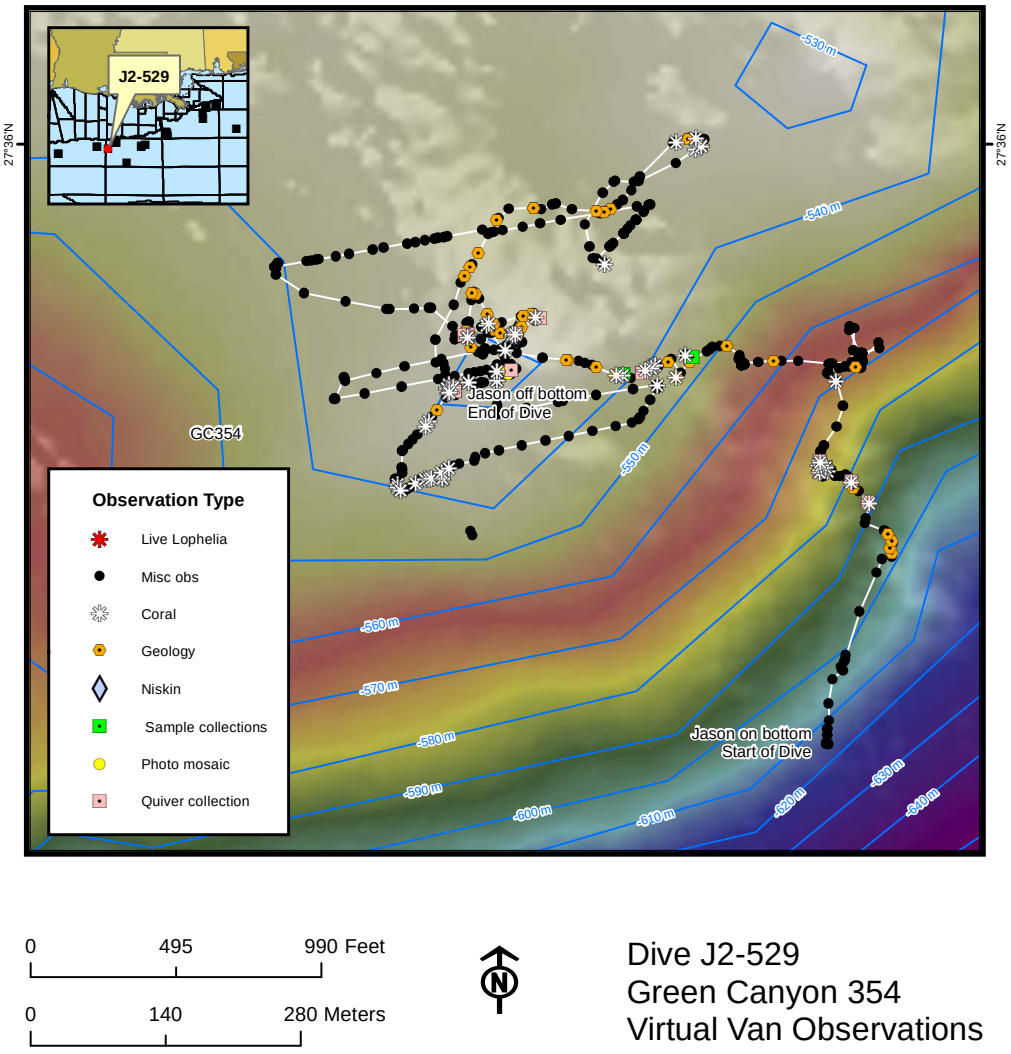

Figure 15. Events observed during lowering J2-529 at GC354 (inset)

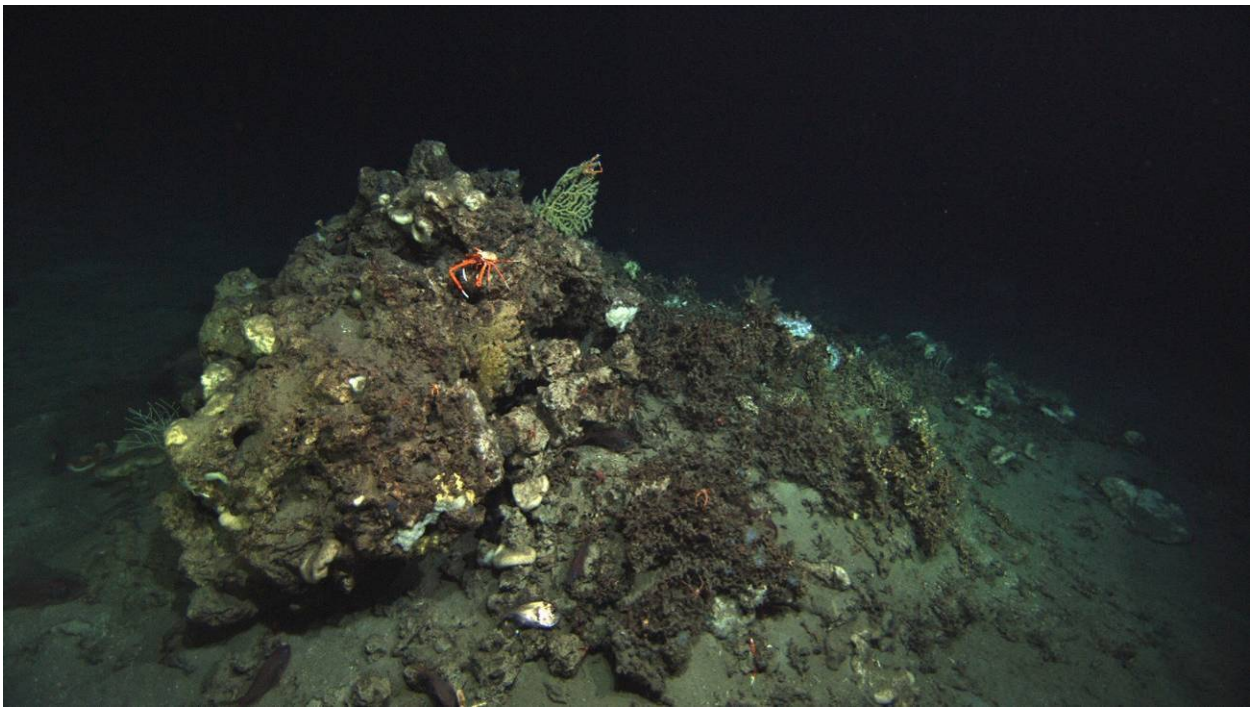

Figure 16. An outcropping carbonate houses a diverse community including *Eumunida picta, Paramuricea* sp., *Hoplostethus* sp., and *Acanthogorgia* sp. (GC354).

We continued to survey the area and collect octocoral and black coral diversity samples. We traversed to the west and sighted a giant isopod in a burrow. Unsuccessful attempts were made to collect this individual. Proceeded again in a westerly fashion, and located gorgonians and black corals at 0121. We sampled black corals (including *Stichopathes* at 0142 as well as gorgonians (including white *Muricedes*at 0215) by 0230. At 0240, we deployed a small syntactic foam marker, Marker 33 (Lat: 27° 35.87 N Lon: 91° 49.51 W at 527m). We continued to explore sonar targets as we worked toward the west. Each of the targets was found to be small mounds or boulders of carbonate that hosted corals and crabs. As we proceeded toward ball marker "GG", we found more and more of these to host dense groups of *Hoplostethus* fish and also increasing abundances of *Lophelia*. Perhaps less than 5% of the *Lophelia* on these mounds were alive (**Figure 17)**. We arrived in the area of Ball Marker "GG" and traversed east and west, then north and south, exploring sonar targets with any relief. At 0350, we discovered a large mound with the greatest amount of live *Lophelia* and *Hoplostethus*. We sampled *Lophelia* and a *Paramuricid* ("B"), fired the single Nisken (0418) on **JASON II**, and deployed a small syntactic foam marker, Marker 37 Lat: 27° 35.89 N Lon: 91° 49.57 W. We proceeded to the east and found more mounds with live tubeworms and fish. At 0444, we located Ball Marker "GG" out on smooth sediment at Lat: 27° 35.90 N Lon: 91° 49.60 W. During this run between Marker 6 and Ball Marker "GG", we collected more than 16 samples of octocorals, black, and *Lophelia* corals, and a few associates (note that the gorgonian corals hosted very few invertebrate associates at this site- dominated by galatheid crabs). From Marker "GG", we proceeded to the starting point for the photo transects.

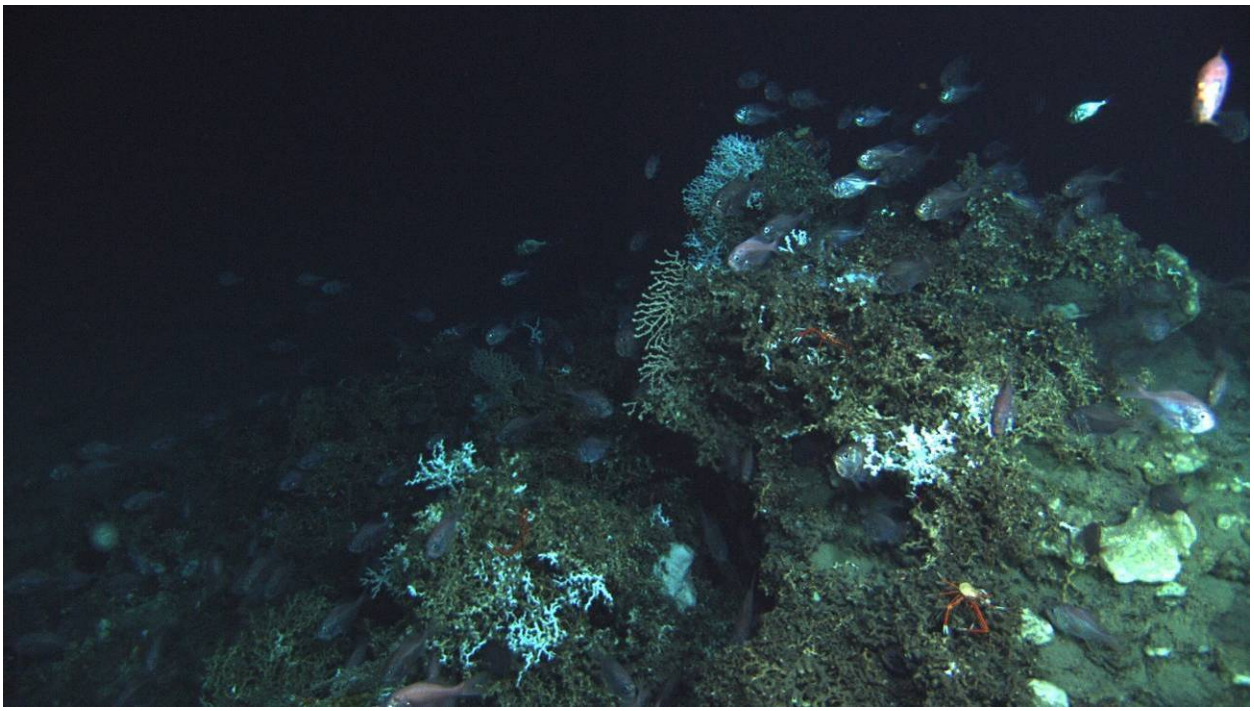

Figure 17. A large school of *Hoplostethus* sp. swim past a primarily dead mound of *Lophelia pertusa* (GC354).

At approximately 0500 hrs, we arrived at the starting point for the transects of the Lophelia mound area of the site. A series of 7 transect lines were run from 0500 to 0900 GMT. During the transect survey, we located a number of our markers from the Lophelia I and previous studies. However, due to the issues with the ship's dynamic positioning system during the transect surveys; we only had time to re-image one of the mosaic sites.

We did a circle around the target for Marker M2, but did not find the marker or mosaic site from 2005, so we headed toward a digital target dropped during the transect. The target was for a boulder containing a lot of dead and some live Lophelia and soft corals. We determined that this was in fact the same mosaic site (marker M1) from JSL dive 4861. Marker M1 is close to the mosaic so not in the site, so we dropped mosaic Marker V on top of the boulder before taking the photos. The camera was having issues with auto-focus so even after playing with the camera settings, the images were still blurry. Also one of the lasers was not visible, so the ball marker is the only measure of scale. The mosaic was photographed from 4 m altitude with no zoom and a heading of 165 (lined up visually with the 2004 mosaic) starting at 09:52 and ending at 10:18. Before setting up to do a mussel pot on the coral rubble just outside the mosaic area, we did several frame grabs with the science HD cam in order to use the ball marker as a measure of the vertical height of the boulder. In the first set of frame grabs at 10:21 from a heading of 165, the camera was parallel with the frame up-and-down, but possibly not squared left-and-right. In the second set around 10:24 from the other side of the boulder (heading: 6), the science camera was squared with the both the basket and the frame. We set down outside the edge of the mosaicked area at a heading of 224 and took a mussel pot. The first attempt was not successful because the action of pushing the arm into the coral rubble pushed the **JASON II** off the bottom and stirred

up a lot of mud. On the second attempt, we got a pot, but the drawstring would not close because the bottom of the pot was plugged with mud. Along with a lot of mud, the pot contained a lot of dead coral rubble with a tiny bit of live coral. Following the mosaic at 1100, we took a series of push cores.

After the pushcores, at approximately 1200, we began collecting Lophelia and other genetics samples. After the pushcores, at approximately 11:30, we began collecting *Lophelia* and other genetics samples. Our first *Lophelia* sample was taken in close proximity to the mussel pot, just outside of the mosaic. We then moved towards a digital target set earlier called 'Rocks with good corals', about 50 m to the SW. We stopped about half way between the mosaic site and the target for Amanda to take a set of background cores. The rock target consisted of several large boulders covered with sponges and diverse octocorals, but only a few small *Lophelia* colonies. We made 4 *Lophelia* collections here, including some for Ian that included live and dead branches for aging. It turns out that last sample was not alive, so 3 colonies were collected for genetics from this rocky area. Marker '36' was placed on the top of a boulder here just before leaving bottom and ending the dive. **JASON II** left the bottom at approximately 1230.

J2-530: GB299- DIVE SUMMARY

19-Oct: GB299
0800: recover JASON II, transit to GB299
1300: single pass of multibeam over site
1400: CTD cast at GB299
1600: launch JASON II at GB299

After the **JASON II** recovery, there was a very short transit over to GB299. The ship used this time to conduct a man-overboard drill and a series of maneuvering drills.

There was no good bathymetric data for the GB299 site, so we obtained one line of multibeam data before the dive. The new Kongsberg multibeam system on the Brown worked extremely well and was processed by James Pelowski of the **JASON II** group in time to use it as an underlay for the dive. We also made a CTD cast before the dive, and were on site and ready to go for a 1600 hrs launch.

J2-530: GB299

JASON II was launched over one of the mosaic sites from the previous year at 2100 hrs GMT. When the ROV reached the bottom, it was apparent that we were 300 m from the target. We landed in an area of high Callogorgia density, so we deployed a short-term time-lapse camera aimed at a Callogorgian fan with an associated ophiuroid. We then proceeded towards the mosaic site. During our transit, we stopped at every opportunity to collect Leiopathes. On the way to the mosaic site, we collected 6 Leiopathes (and nearby octocorals) into the quivers. Leiopathes is one of the targeted species for population genetics, and we have thus far not encountered a site in this area of the Gulf where they are highly abundant. This is the primary focus of this dive.

We located the mosaic site at approximately 0040 hrs. We re-photographed mosaic B at an altitude of 4m with no zoom (0055 hrs.). The focusing issues from the previous dive were resolved, and as this was a flat area of mud with scattered Callogorgia and associated ophiuroids, the pictures were consistent with respect to lighting. The mosaic was completed at 0130 hrs. We dropped DVL targets on the four corners of the mosaic to avoid sampling within it. The mosaic was complete at 0140 hrs and a series of push cores were taken.

At 0200, we located marker D and set up to take another repeat mosaic. The character of this mosaic was the same as marker B, in that it was a flat mud bottom with scattered Callogorgia. We photographed the mosaic at 4 m altitude with no zoom and finished at 0236 hrs. Again, we dropped digital targets on the corners of the mosaic to avoid sampling within it. At 0240, the mosaic was complete and an appropriate place for push cores was selected and 3 push cores taken (**Figure 18)**.

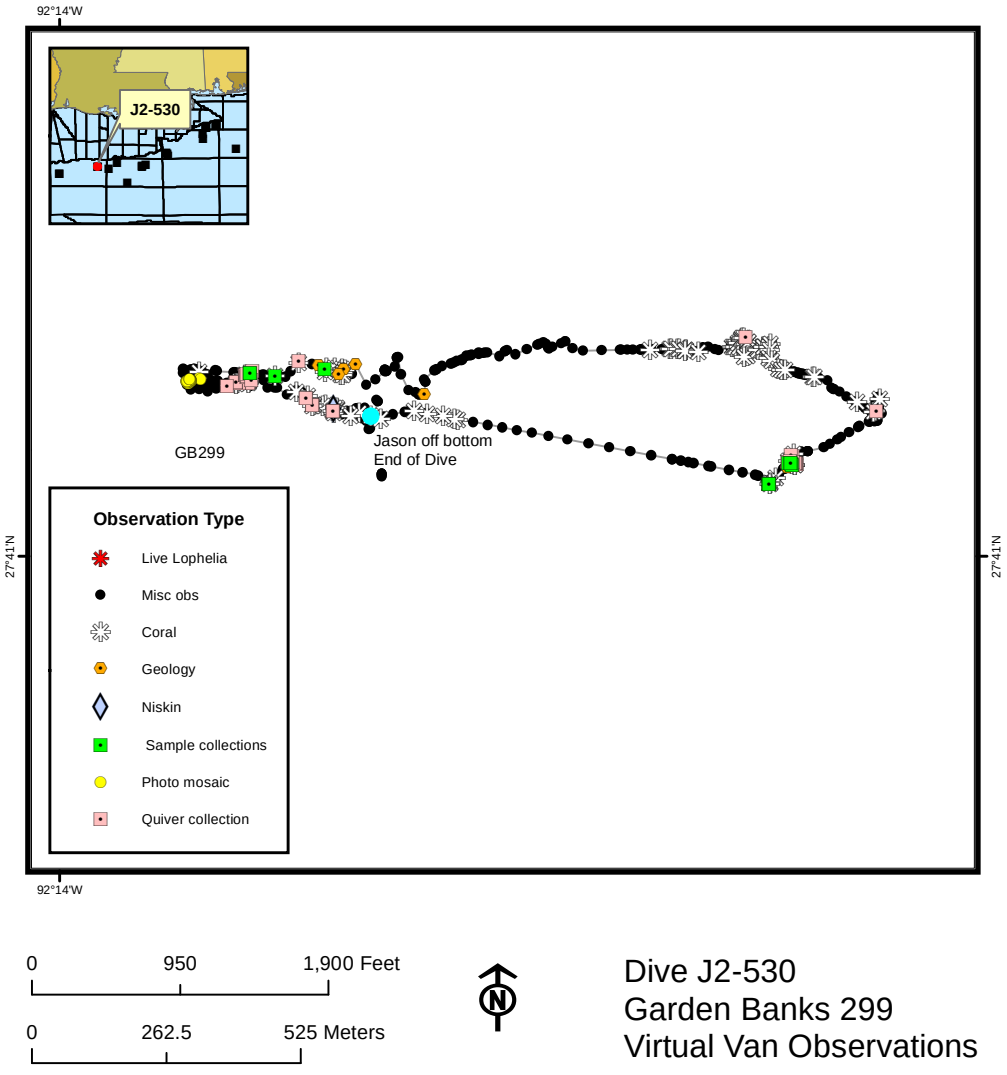

Figure 18. Events observed during lowering J2-530 at GB299 (inset)

At 0255, we began to transit to the next geo target and make *Leiopathes* (and other) genetics collections as we explored different areas of the site. This was largely in an easterly direction. The area contained mostly mottled sediment with patches of *Callogorgia* hosting *Asteroschema*. *Stichopathes* and *Bathypathes* black corals were also present in smaller numbers. Collected *Leiopathes* and observed fish, like *Benthocometes*. The region was relatively flat and almost completely sedimented with patches of cobbles and rocks hosting corals, including *paramuricids* distributed almost continuously over several hundred meters. Numerous cerianthid anemones would dominate small patches in depressions. Once past these clusters of anemones, we increased speed to proceed to Geo2 site, a known site to have corals. Along this transit, we observed single *paramuricids* and *Stichopathes* on small outcrops. Bamboo corals were also observed (0608). Continued to sample *Leiopathes* and observe increasing numbers of *paramuricids*, bamboo corals and Leiopathes (sampled them) with small outcrops (**Figure 19)**. Observed associates, in particular, "candyland" ophiuroids on bamboo corals (heading trended 112). At 0702, came upon a large *Callogorgia* field (**Figure 20)** with some *Leiopathes* (Lat: 27° 41.15 N,Lon: 92° 13.13 W). We were in this "field" until ~0745, when we observed more anemones (depth 353m) and schools of fish. Made additional collections of *Leiopathes* (include a "pink" morph) and corals from diverse outcrops, now larger than before, covered with corals and basket stars. Deployed Marker 35 at this rock outcrop referred to as "Leio Rock", where extensive collections were made. Noted large number of free-living ophiuroids on the seafloor and sampled them (0942). At 1004, sample Callogorgia with Asteroschema into Blue RNA Chamber, and at 1022, sampled venus flytrap anemone. At 1024, took four sediment push core samples (#5,6,7,8), finishing at 1043.

Figure 19. Yellow *Paramuricea* sp. and an associated ophiuroid are seen along with *Actinostolid* and flytrap anemones on top of a small mound of carbonate rubble (GB299).

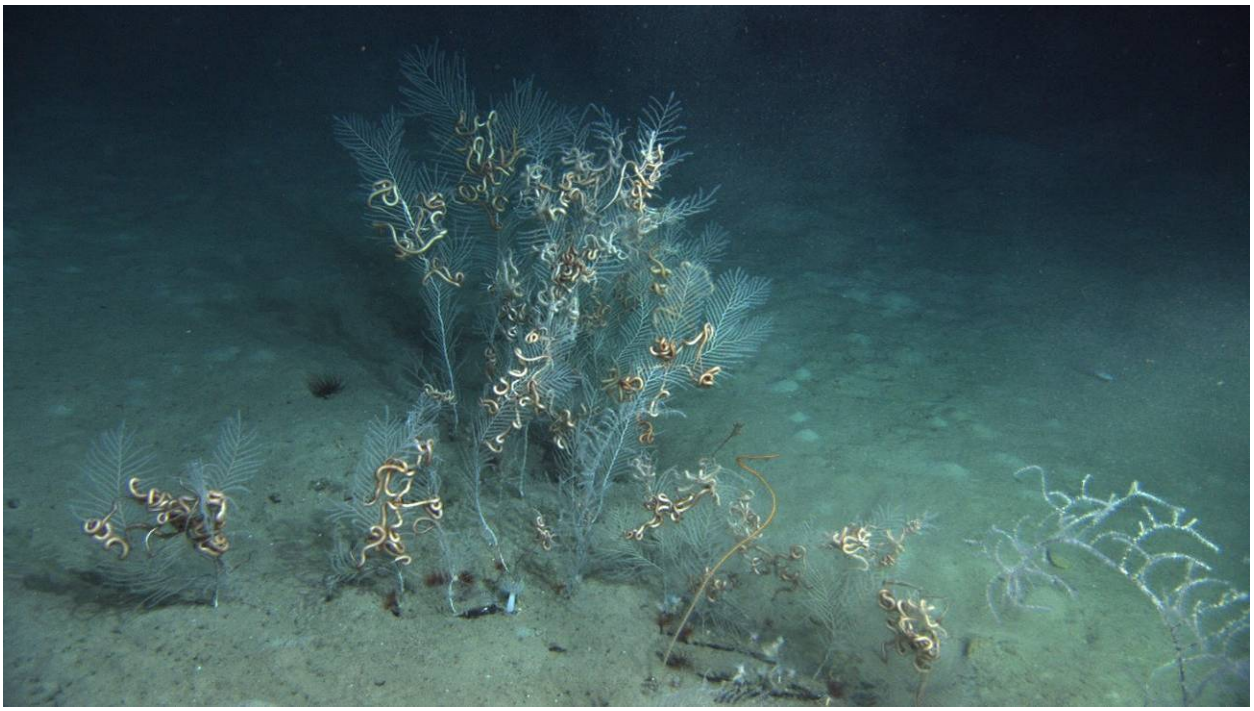

Figure 20. A large number of ophiuroids colonize a patch of *Callogorgia* sp., with a *Stichopathes* sp. and *Leiopathes* sp. present in the foreground (GB299).

By 1030, we had collected 30 Leiopathes individuals into almost all of our available sample containers, and we began to transit back to the short term camera deployment to pick it up. When we arrived at this location at 1130, we closely inspected the camera. The LED array was on and the pressure housing appeared intact. With the remaining available time, we transited to a nearby spot where we had dropped a digital target at the beginning of the dive. We collected one unidentified antipatharian, one Callogorgia plus ophiuroid, and one Paramuricea. We then returned to the camera location, set it on the quiver rack on the basket, held on to it with the manipulator and left the bottom at approximately 1230 GMT.

J2-531: GB535- DIVE SUMMARY

20-Oct: GB535

0800: recover JASON II, transit to GB535
1400: CTD cast at GB535
1600: launch JASON II at GB535

Recovery, transit, and the CTD cast all went smoothly. The Gulf was flat calm today, and there were Mahi sighted off the port bow. Fishing ensued and a Mahi was caught off the starboard quarter in between the CTD cast and the **JASON II** launch at 1600 hrs.

J2-531: GB535

JASON II was launched at 2100 hrs GMT and hit the bottom at the exact coordinates for the start of the dive (**Figure 21)**. The short term time-lapse camera was deployed at the

location of mosaic marker C so that it was not impacting anything in the mosaic site and was facing a few different species of corals.

At 2221 hrs we began photographing the repeat mosaic at Marker C. This mosaic site is on top of a tall boulder, so the auto altitude made it difficult for the sub to stay steady. Instead we used auto-depth and photographed at an altitude of 4 m above the marker, but this became 6 m altitude at the deeper parts of the mosaic. The photos at the greater depth seemed very dark, so it might be better next time to just struggle with the auto altitude in order to get clear photos. We completed the mosaic at 2246 and looked for a spot to mussel pot. The immediate area of the mosaic had no coral, only dead clam shells, but we located a small clump of live and dead Lophelia on a boulder about 10 m from the mosaic. Genetic marker 20 was right next to the patch we intended to pot. We attempted to mussel pot a small clump, but were unsuccessful because of the way the coral broke apart. The bag on the pot got caught on a large chunk of coral and was pulled off of the rim of the pot so that it was flopping around. We decided to try the pot later in the dive and instead set up to take push cores associated with this mosaic.

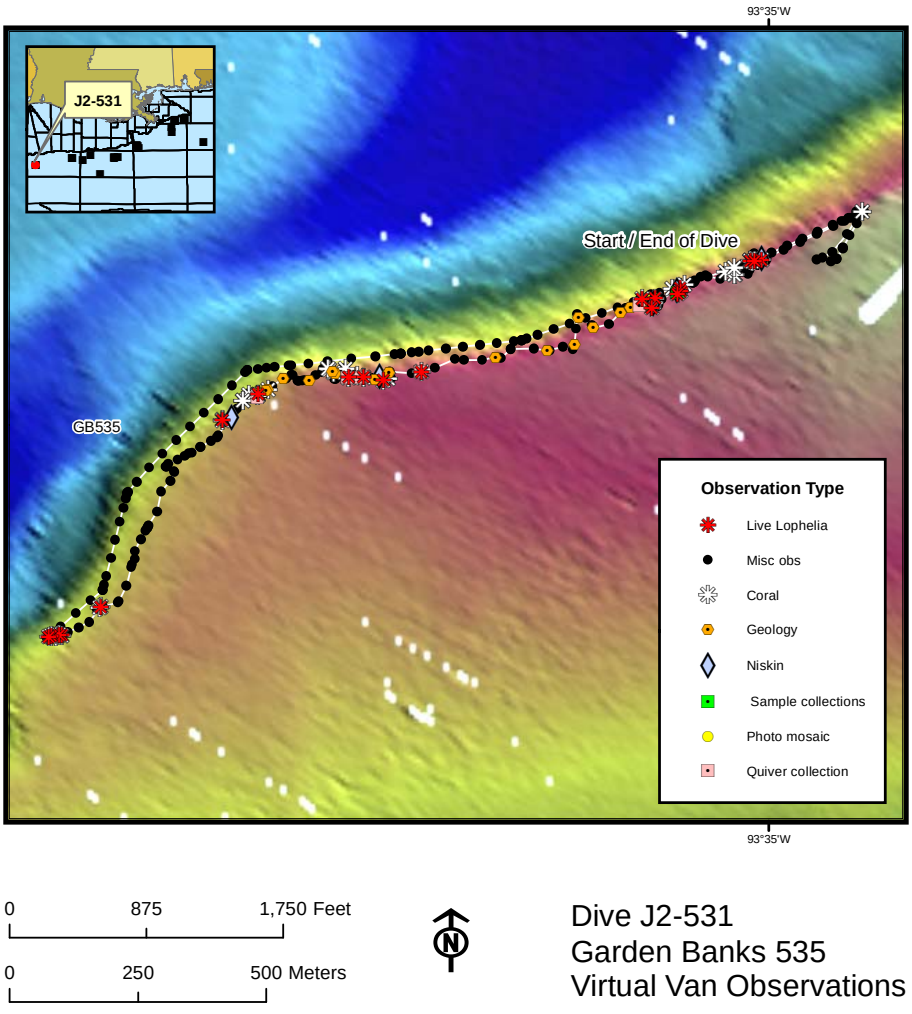

Figure 21. Events observed during lowering J2-531 at GB535 (inset)

At 0049 we located mosaic Marker F. This was a vertical mosaic that, in 2009, was photographed using the digital still camera mounted on the front of the basket in the forward-looking position. This time we set up to "photograph" the mosaic using the frame grabs from the HD science camera. We started with the sub on the bottom as close as we could get and still have the bottom of marker F in the frame. The camera position was lined up by visually squaring left-to-right with the basket and then with the frame up-and-down by using the pilot cam to look over at the science camera. We first took frame grabs only moving the sub up slightly to get the top of the mound, but most of the area fit into one shot. This was completed at 0052. It seemed we may have been missing some information in the right side, so zoomed in and used the camera pan-and-tilt to get closer images of the mosaic area. Imaging of Marker F was completed at 0057 and we moved over to repeat the Marker E mosaic located only a few meters away from F.

The Marker E mosaic is a downlooking mosaic of a tall mound with a lot of dead *Lophelia* rubble and many live *Stichopathes* and sponges (**Figure 22)**. Similarly to the Marker C mosaic, the topography of this mound made it difficult to use auto-altitude so we decided to use auto depth. Again, when we started with an altitude of 4 m and ½ zoom at the highest point, the photos at the lowest points (around 6m) were quite dark. We tried increasing the exposure compensation to the highest setting, but this didn't help much. The re-photographing of mosaic E began at 0114 and was completed at 0150. After the mosaic, we looked for a spot to mussel pot, but did not find anything that looked suitable. One of the niskins was fired at this point. At 0205, we set up for a series of push cores near the Lophelia mosaic (**Figure 23)**.

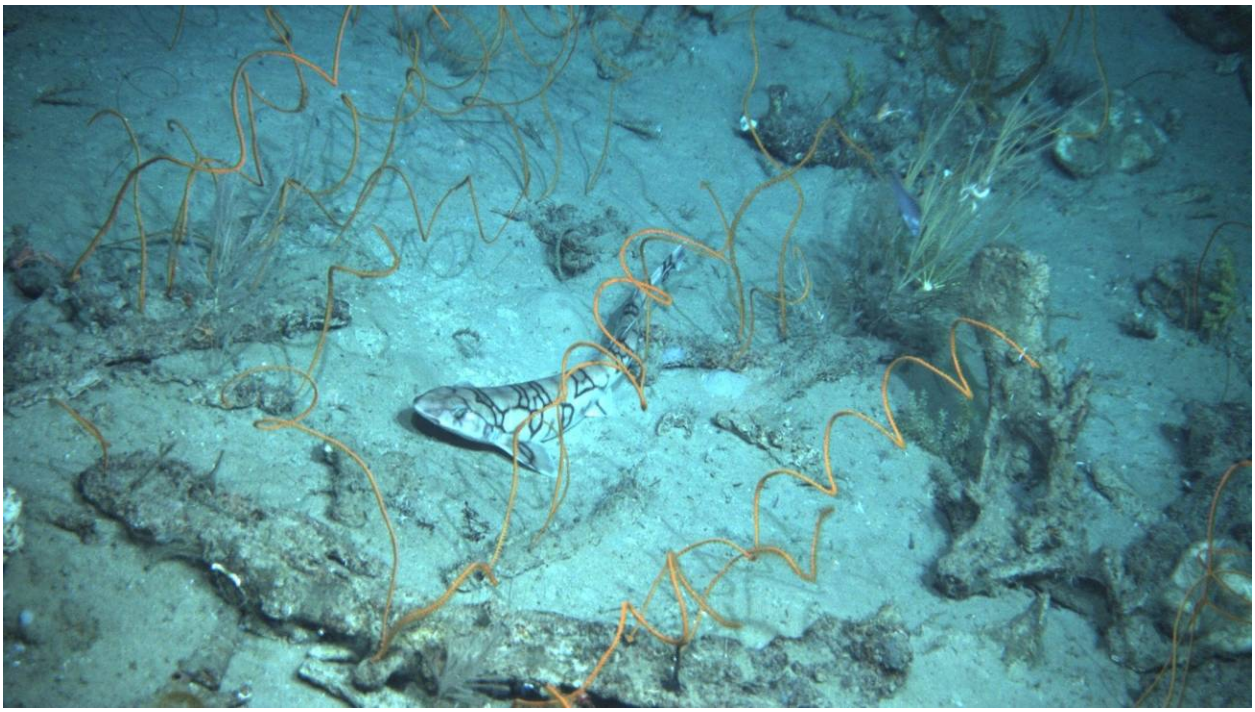

Figure 22. A catshark is surrounded by *Stichopathes* sp. and a colony of black coral (GB535).

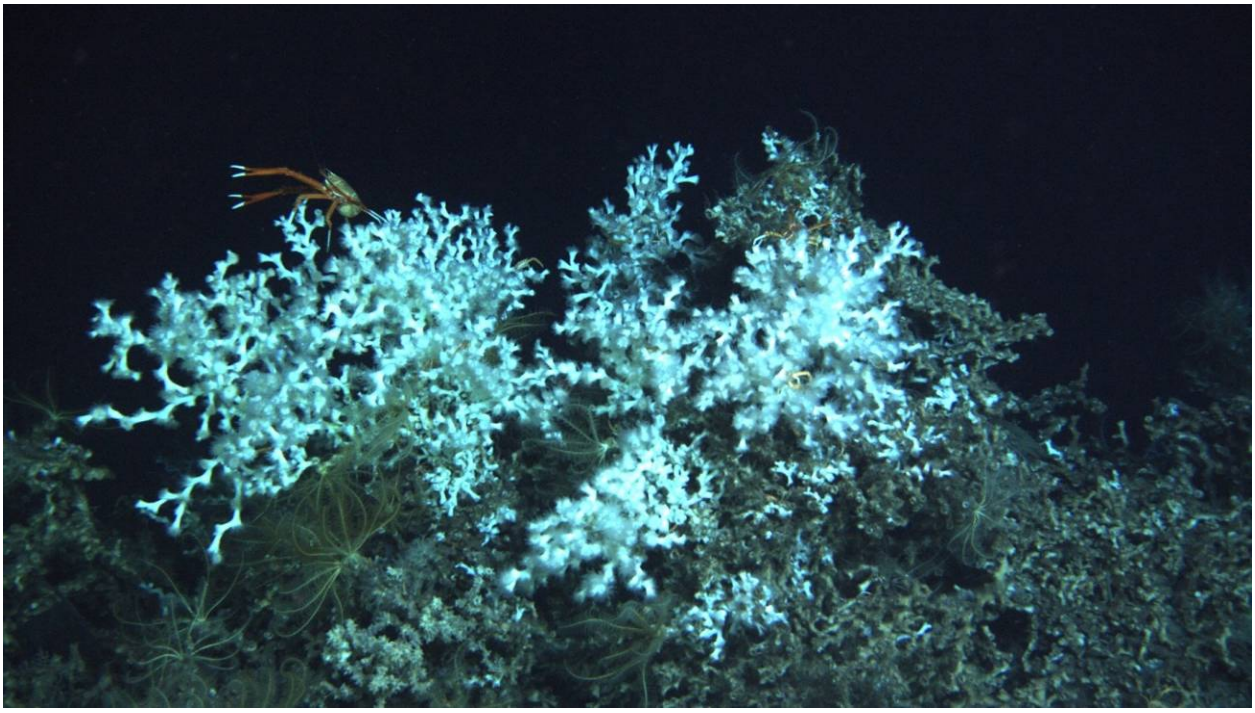

Figure 23. Several crinoids and a single *Eumunida picta* settle on a large thicket of live and dead *Lophelia pertusa* (GB535).

We began to transit south-west along the ridge to explore for additional Lophelia mounds in an area that was not covered last year. At 0220 a small gorgonian was collected, but nothing else was noted along this ridge line until live Lophelia was collected at 0300. Another niskin was fired at 0315. We continued on in this direction until finding another very small carbonate with a small octocoral on it at approximately 0320. There were numerous small pieces of carbonate like this along the way, occasionally colonized by small coral colonies. At 0330, a larger carbonate boulder was found with numerous sponges and galatheids. A small piece of *Lophelia* was sampled from this boulder. At 0345, another boulder was found and a small piece of a black coral was collected. It appeared that this was actually an old dead antipatharian with another species colonizing its skeleton. At approximately 0400, another outcropping boulder was found and Lophelia and an octocoral were sampled. At approximately 0420, **JASON II** was being pulled offsite by Medea and there was a short period of tether management. Between 0430 and 0500, a series of low-lying outcrops were seen, primarily colonized by sponges and a few octocorals. At 0500, a larger outcrop was sampled for *Lophelia* and a Paramuricea. At 0515, a niskin sample was attempted, but the bottle failed to fire immediately, but appeared to have fired by 0540. A few more low outcrops were observed, and at 0545 another *Lophelia* sample was taken. Another outcrop was found at 0600, followed by another with live *Lophelia* and octocorals which were sampled between 0630 and 0720. Another low-lying carbonate rubble patch was found, and a small colony of *Lophelia* was sampled into the biobox for physiological experiments at 0825.

This was the furthest south that our survey went. We began a series of transects running north along the ridge at approximately 0900. There were 9 transects run along the ridge until we had returned to the site of the camera deployment at approximately 1100 hrs. We then returned to the mosaic C site and took a mussel pot sample of coral rubble with a small piece of live coral at the base of the outcrop where the mosaic was shot. The dead coral framework under the mussel pot collection was also collected for radiocarbon analysis. **JASON II** was brought around the outcrop where the time-lapse camera was positioned to get a series of photographs of the vehicle, and then the camera was placed on the basket shortly before recovery of the vehicle. **JASON II** left the bottom at approximately 0700 for an early recovery at 0730.

J2-532: GC140- DIVE SUMMARY

21-Oct: GC140

0730: recover JASON II, transit to GC140
1700: launch JASON II

This was a long transit, so Matt Heintz agreed to come up a bit early to get underway, and to go in at 1700 rather than 1600 to accommodate the longer transit, but stay on the same **JASON II** watch schedule.

J2-532: GC140

This was a very shallow site (360 m to start) so **JASON II** was on the bottom very quickly (**Figure 24)**. We began at the bottom of a small depression, which appeared to be a fairly active seep when we first saw the seafloor. There were numerous patches of dark, apparently brine-stained sediments with white bacterial mats at the bottom of this depression. We examined the area to try to find the local bathymetric low in case it contained a distinct brine feature, but none was found. As we began to climb up the slope towards the previously surveyed mound, we stopped to sample a few octocorals at approximately 2300 hrs GMT. We then found a carbonate mound with tubeworms growing on the side. We stopped to collect the tubeworms into the RNAlater blender at 2325. At 320 m depth, this represents that shallowest collection of tubeworms (appeared to be the relatively rare *Escarpia* sp.) in the Gulf of Mexico (**Figure 25**). We fired a niskin in this area at approximately 2345. At the base of the slope, we encountered another carbonate outcrop and stopped to collect octocorals into the quivers at approximately 2400. When we left this outcrop, we noticed a bubble stream rising from below an overhang, but we could not locate the source. At the same time, the bridge called to see if we were over a natural seep since they had noticed an oil sheen on the surface.

As we climbed the slope, we stopped to collect *Callogorgia* (appears to be *C. gracilis*) on another outcropping carbonate at 0030 hrs. This collection was at approximately 280 m depth. We continued up the slope to 260 m depth when we encountered a wrap in the tether that began to form a knot. The pilots worked on resolving the issue with the tether before it got any worse between 0100 and 0130, at which point we continued on to the next way point at the top of the mound.

Between 0130 and 0300, a series of genetics collections were made, focusing on Leiopathes and octocorals. The terrain consisted of large slabby outcrops surrounded by sediments (**Figure 26**). A variety of corals, including *Callogorgia*, *Leiopathes*, *Paramuricea*, hydroids, tuna, and snowy grouper were observed. The tether remained a problem as did the doppler tracking- the vehicles experienced Doppler loss at times and would simply lurch and move forward. We continued a general transit to Geo target #4. We collected Callogorgia with a previously unseen banded ophiuroid (0132). At 0141, we collected an orange *Leiopathes.Lophelia* was not observed in this area. At 0154, observed catshark egg cases and gooseneck barnacles associated with *Leiopathes* (depth 261m). Between this time and 0306, we sampled 12 corals including *Callogorgia*, *Leiopathes*, *Paramuricea*, as well as hydroids, stalked and non-stalked barnacles on two large neighboring outcrops. Following this sampling, we deployed Marker 39 (0315). At approximately 0300, the decision was made that *Leiopathes* and octocorals were in sufficient densities in this area to warrant making collections in this area for the majority of the dive.

We set up to take a forward-looking mosaic of several very large Leiopathes colonies at 0300. A Leiopathes colony on the right of the mosaic (heading: 218) and a tiny Callogorgia were sampled for genetics and genetic marker 39 was deployed in front of the corals in a saddle created by a fuzzy spherical sponge. The HD science camera was squared with the basket and frame, but tilted slightly upward to account for the 10 degree downward pitch of the vehicle. First, a farther mosaic was photographed in a single line by moving the **JASON II** from the bottom to the top of the corals. Then, the camera was zoomed in about halfway and a second set of frame grabs were taken in two lines, moving downward on the left and then up again on the right. Finally, we took some downward-looking photos with the digital still camera (0330 hrs.) to get a sense of the distance from the marker to the corals. However, the coral branches mostly obscured the marker, but the top edge is visible in some shots.

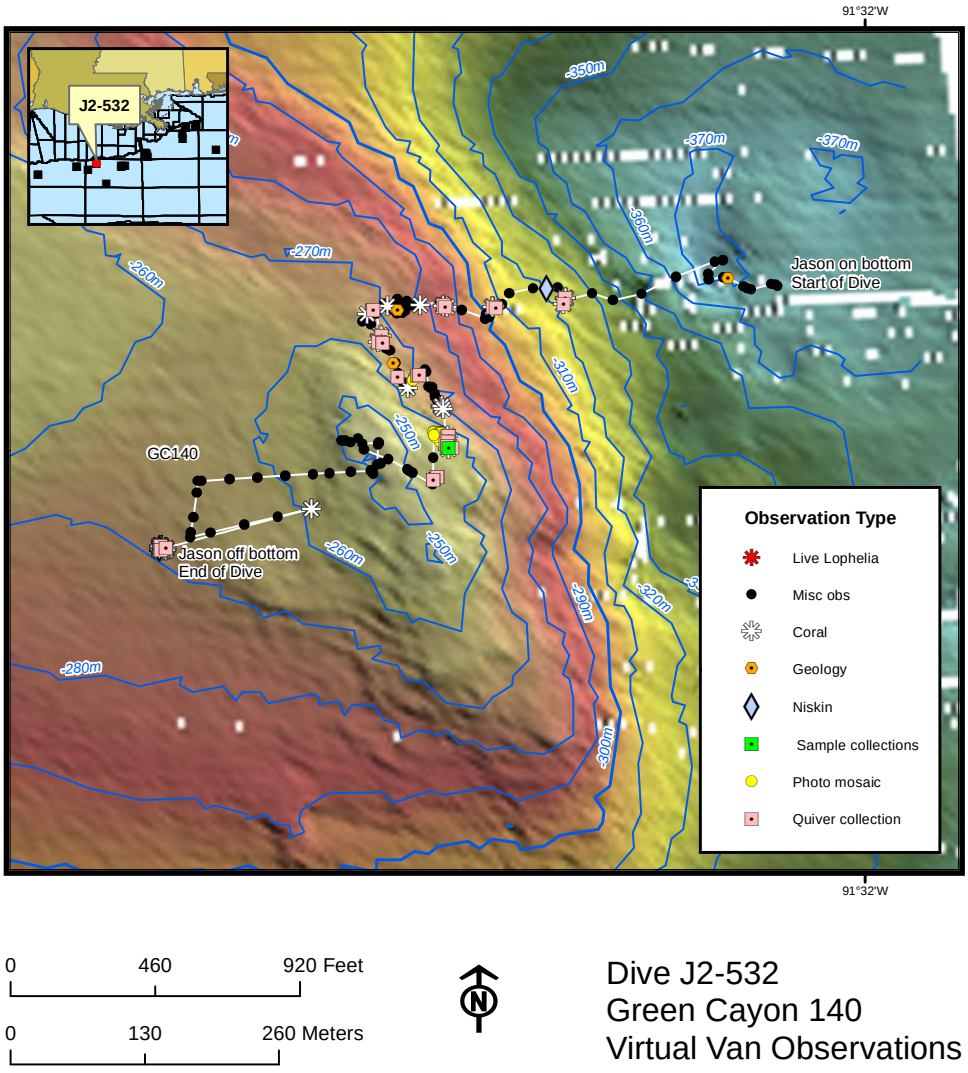

Figure 24. Events observed during lowering J2-532 at GC140 (inset)

We then took a series of push cores between 0340 and 0400 hrs. Genetics collections followed after this, with approximately 20 Leiopathes and 10 Callogorgia and associates collection between 0400 and 0700 hrs. We came across more blocky outcrops on which white Leiopathes, yellow paramuricids, black bushy corals were observed and sampled. Black and yellow striped ophiuroids (different from what we have observed during Lophelia II) were observed on the seafloor. Collection attempts were unsuccessful. One outcrop at 250m depth (Lat: 27° 48.62 N Lon: 91° 32.21 W had several bushy *Leiopathes* with basketstar, cat shark egg case, and barnacle associates, which were collected. Deployed mosaicMarker W (0545) and thought this site worthy of a downlooking mosaic. (In total, approximately eight *Leiopathes*, one paramuricid, and one antipathariancoral and associates were collected between 0420 and 0541 hrs.

At 0545, we established a new horizontal mosaic site marked with mosaic Marker W. The site is a large boulder with several colonies of Leiopathes and other black corals. Several genetics collections were made here prior to photographing the mosaic. The entire boulder was photographed using more-or-less manual control of **JASON II**'s altitude because neither auto altitude or auto depth gave satisfactory results (either the sub was too unstable or photos too dark because we couldn't stay close to the uneven boulder). This was the first mosaic so far this cruise in which we used both strobes to get enough light on the edges of the boulder (usually this makes it too bright) and then took pictures rapidly so as to not allow the strobes to recharge completely.

Just after 0700 hrs, we set up for a series of photo transects. One transect line was complete, and another was begun when the Doppler on the vehicle went out. A series of attempts to resolve this issue failed, and after a series of still images were obtained, we cancelled the transects due to the inability to hold a straight line.

Figure 25. A close-up view of an *Actinostolid* anemone with escarpid tubeworms in the background (GC140).

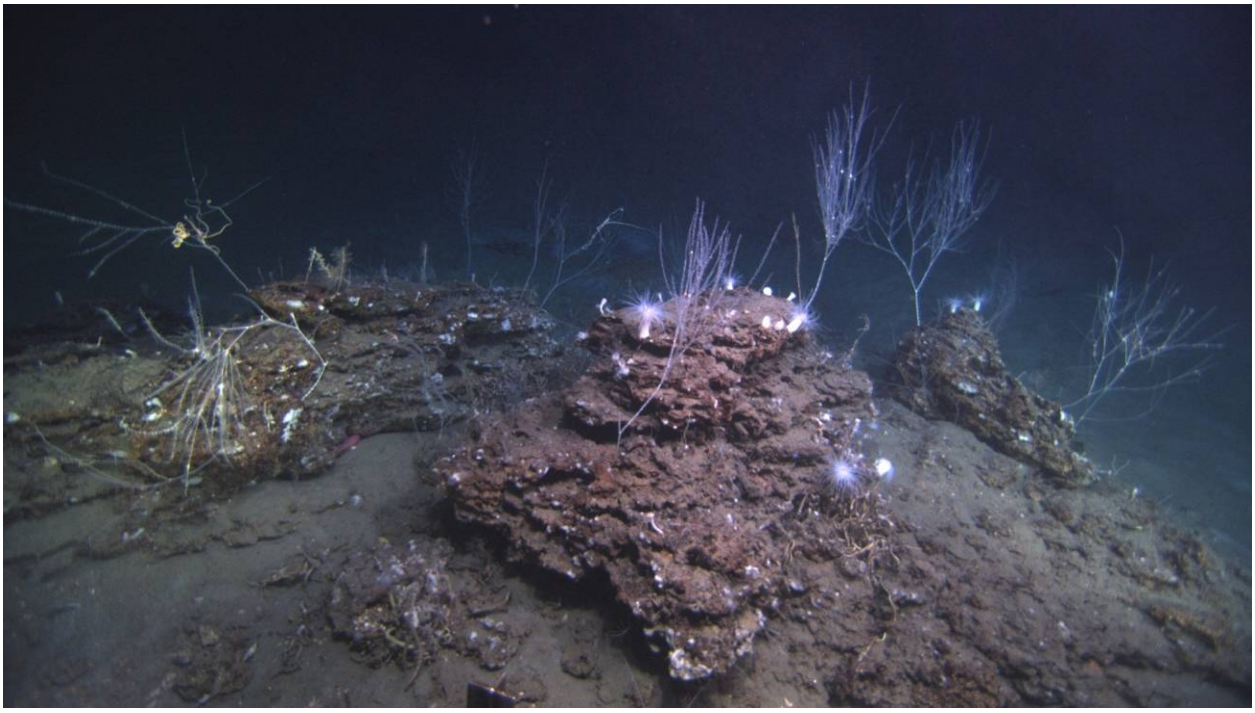

Figure 26. Bamboo corals sit on top of several large outcrops with a number of *Actinostolid* anemones and tubeworms scattered throughout the area (GC140).

At approximately 0900, we began to sample for genetics once again, while making our way south to the end of the large mound that the efforts had been centered on. A series of Leiopathes collections were made as we moved south. The terrain of the mound did not change much as we moved to the south, and included numerous large Leiopathes colonies. At the southern end, at approximately 1000, we transitioned to a series of mounds apparent on the bathymetry and completed our collections. At this point, nearly every quiver had a sample in it.

Between the mounds and the southern extent of our dive track there was an area of plain, sedimented, flat bottom. As we approached the end of this area, we arrived at a nearly vertical wall of carbonate that we followed almost 50 m directly upward. The surveyed area in the southern end of the site consisted of very high relief carbonate structures with very abundant Leiopathes of all of the color morphs that we have previously observed. Unfortunately, the navigation in this area was extremely difficult, we had very little room for additional samples, and we were nearly out of time. We surveyed a small part of this area, and began our ascent to the surface at 1230 GMT.

J2-533: GC249- DIVE SUMMARY

22-Oct: GC249

0800: recover JASON II, transit to GC852
1200: recover current meter mooring at GC852
1400: CTD cast at GC852
1500: depart GC852 and transit to GC249

1900: multibeam survey of GC249
2400: launch JASON II

J2-533: GC249

As soon as **JASON II** was recovered, we transited approximately 4 hrs to GC852 where the second year-long current meter deployment was located. Upon arrival, we called up the mooring using the acoustic release. This release worked perfectly, and the current meter array was quickly on the surface. After an attempt to come alongside and use the boat hook to retrieve the array failed, the small boat was launched and brought the array over to the ship where the crane was used to haul the array up through the A-frame. At approximately 1400 hrs, the mooring array was secure on deck and we performed a CTD cast at the site. In addition to our sampling, we supplied water samples to a NOAA collaborator of the survey technician on board.

Once the CTD cast was complete, we transited approximately 4 hours to GC249, one of the exploratory sites of the cruise. Since we had not previously visited this site, we conducted a multibeam survey over the area prior to lowering the ROV. The multibeam survey went very well, and the features apparent in the 3-D seismic were also visible in the backscatter data from the multibeam survey. In addition, as we passed over an apparent mud flow feature in the southwest corner of the survey we observed a series of gas plumes rising from the center of the feature, interpreted as an active mud volcano. Once the survey was complete and processed (by James Pelowski of the **JASON II** group) we used it as an underlay for the dive, which began at 2400 hrs.

This was scheduled as a 16 hour dive (**Figure 27**). We surveyed a high-amplitude point in the 3D seismic, a few targets picked out by Bill Shedd and Harry Roberts two years ago, and a few targets chosen from the newly acquired multibeam survey. **JASON II** reached bottom at 0530 GMT at 830 m depth. The seafloor was soft bottom in this area, although the seismic map indicated high reflectivity. A series of low lying mounds were observed, possibly consisting of buried gas hydrates. A single push core was taken at 0600 in an attempt to see if the gas hydrate was near the surface, but none was visible in the core. Some small seep areas were also seen beginning at approximately 0630, primarily composed of brine-stained sediments, bacterial mats and occasional small clam shell beds (**Figure 28**). No living clams were observed.

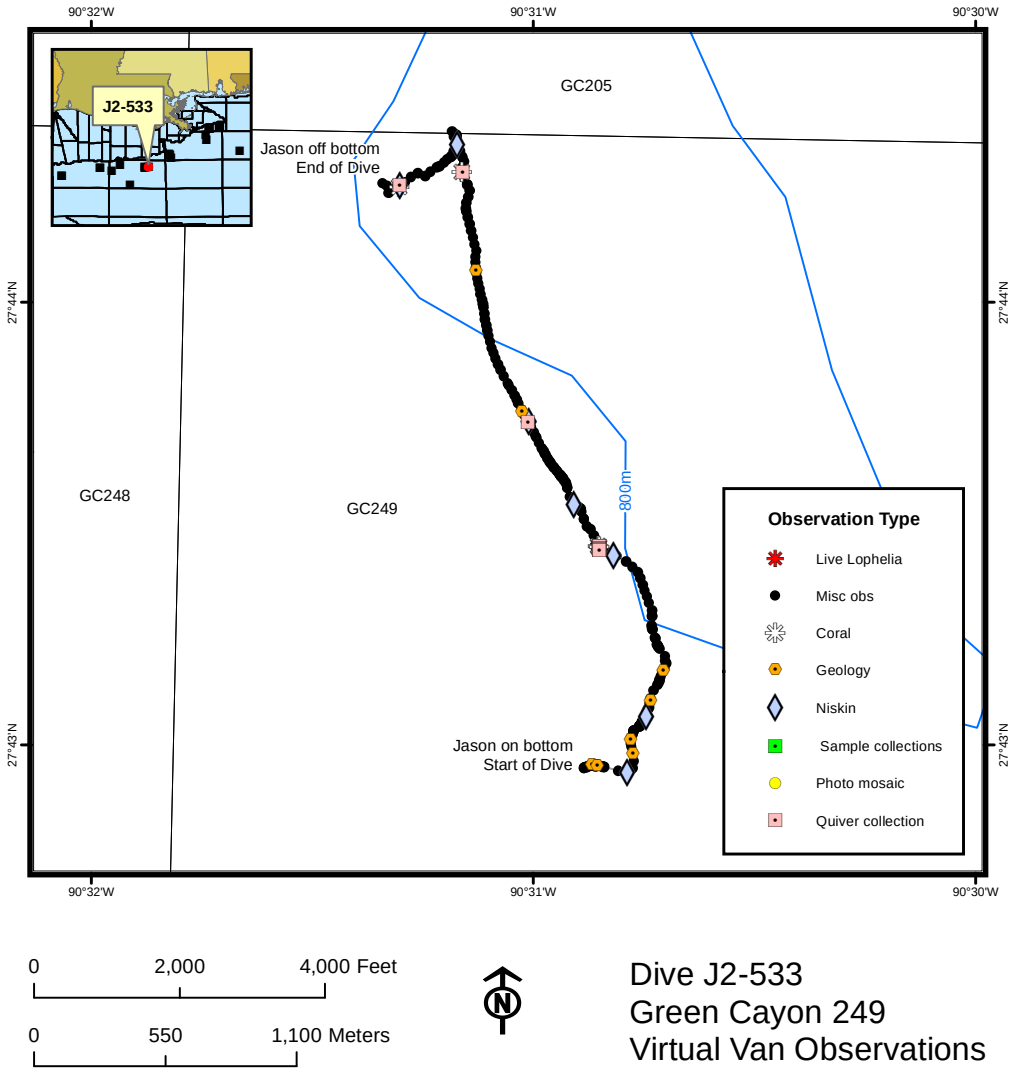

Figure 27. Events observed during lowering J2-533 at GC249 (inset)

At 0710, a larger seep area was found, but still was primarily composed of dead clam shells and bacterial mats. There were also a few Callogorgia with symbiotic ophiuroids seen growing on the clam shells, and we stopped to make some genetics collections at 0720, and a series of push cores at 0730. A larger bed of dead clams and some live mussels was found at 0810. At approximately 0900, a small carbonate with a few live mussels and tubeworms was observed (**Figure 29**), and samples of the seep fauna were collected. As we continued to survey between the geo targets, a few more small clam beds were found colonized by Callogorgia. We stopped to collect the gorgonians at 1115, 1125, and at 1230.

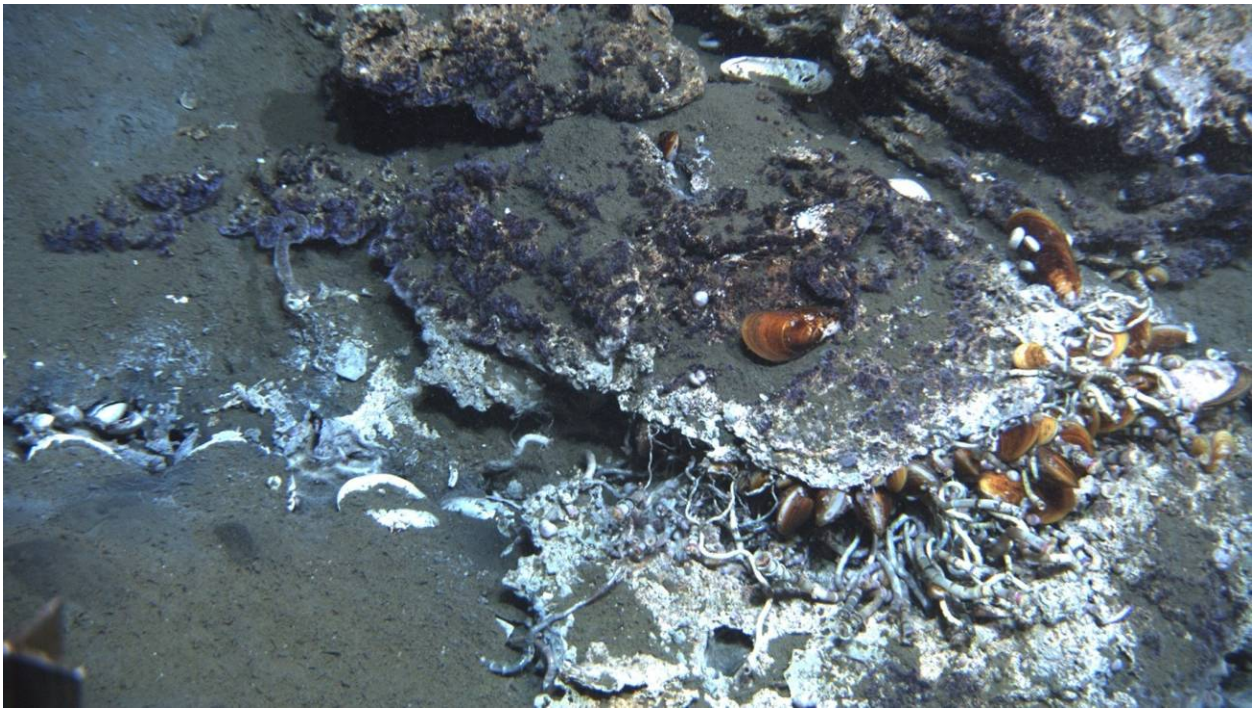

Figure 28. Bacterial mats and purple ciliates cover a number of *Lamellibrachia luymesi* tubeworms and *Bathymodiolus childressi* mussels (GC249).

Figure 29. *Seepiophila* and *Lamellibrachia* tubeworms grow amongst *Bathymodiolus childressi* mussels (GC249).

Although some Callogorgia were sampled, there was little else at the geo targets, so the decision was made to call the ROV up early at 1230 for a 1300 recovery. This allowed for an increased amount of time on the seafloor at one of our primary study sites, VK906.

J2-534: VK906- DIVE SUMMARY

23-Oct: GC249, VK906

0800: recover JASON II at GC249, transit to VK906

2000: launch JASON II at VK906

24-Oct: VK906

0800: recover sediment trap at VK906

J2-534: VK906

JASON II reached bottom at 0150 hrs GMT (**Figure 30**). We were on the eastern edge of Roberts Reef and began to search for an appropriate place to leave the short-term time lapse camera. As we moved to the north along the eastern edge of the coral at 390m depth, we quickly found a flat area where we could set the camera down looking at Lophelia and a few mobile fauna. The camera was deployed at 0200 and we moved on to search for mosaic marker J. We located the marker at 0210, 10-20 m to the N of the position in the target file.

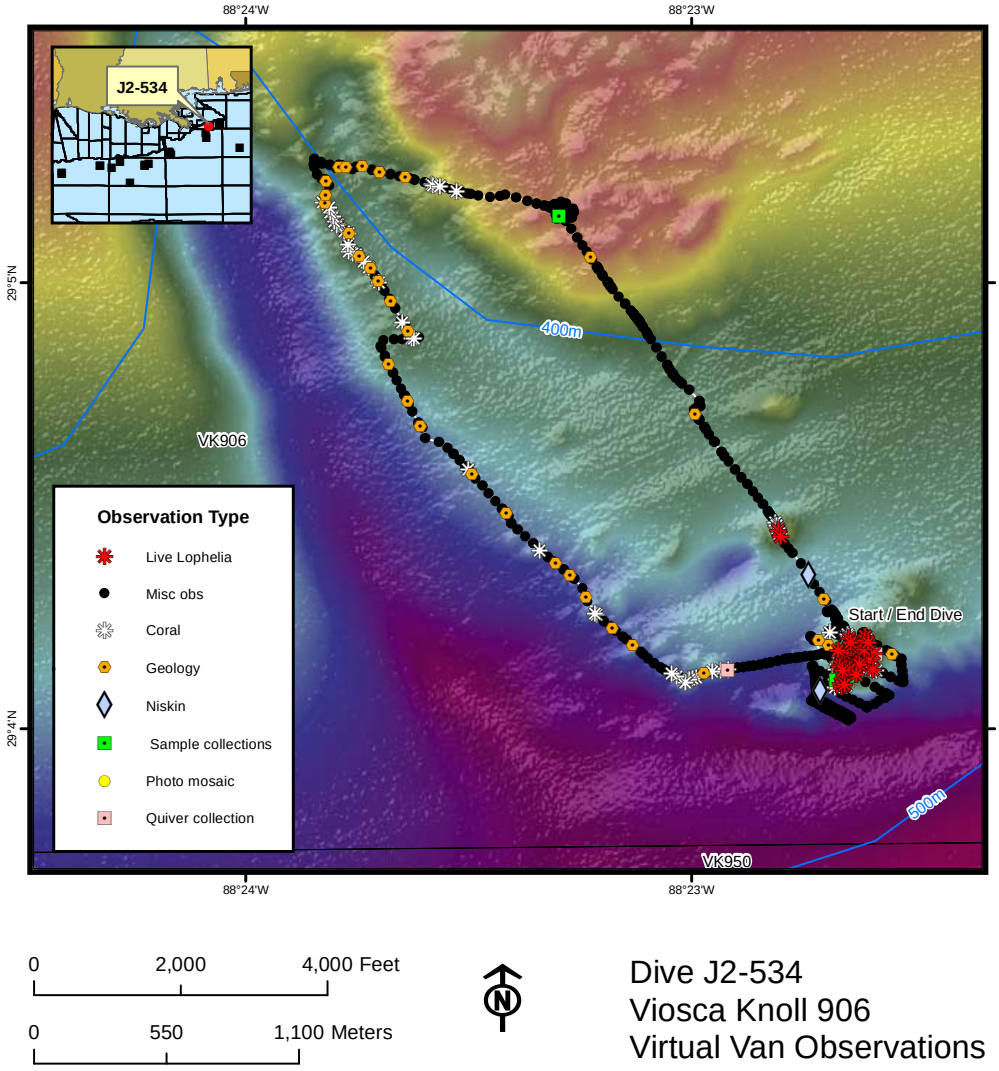

Figure 30. Events observed during lowering J2-534 at VK906 (inset)

We began the mosaic at marker J at 0220 hrs. This mosaic consisted of 7 lines and was complete at 0237 hrs. We then moved on to mosaic marker L. This marker was quickly located at 0245 hrs, and the mosaic was begun. There were 5 lines run and the mosaic was complete at 0310. A niskin was fired shortly after completing the second mosaic while over the Lophelia at an altitude of 2m at 0313 hrs. Niskin B was fired just after at 0322 at an altitude of 2.5m over Lophelia.

A series of push cores were then obtained near each of the mosaic sites. The first set of 5 cores was near mosaic marker L from 0335 to 0430. The ROV moved over to mosaic marker J and took the second set of push cores between 0445 and 0505. After the push cores, we moved on to collect one of the temperature probes (T1). This marker was quickly found and collected at 0510 hrs.

Over the next 7 hours, a series of collections were made for the genetics work, the live coral work, and the hydrocarbon analysis of tissues. Lophelia were collected in pairs into the biobox for the live experiments and into the quivers for genotyping. Lophelia and Leiopathes were also collected into the chamber pot for RNA fixation at depth. Leiopathes was collected into the quivers when it was found as well (**Figure 31**). Larger mobile fauna were also sampled for tissue analysis of hydrocarbons. Between 0525 and 1200 a total of 11 Lophelia, 6 white Leiopathes, and 5 red Leiopathes were collected. In addition, anemones, urchins, and galatheids were collected for the hydrocarbon analysis (**Figure 32**). During these collections, at 1045 GMT, temperature probe T3 was found and retrieved.

At 1200, **JASON II** came up off the bottom to use the forward-looking sonar to find the sediment trap. It was located at approximately 1240 to the north of the position that it was deployed form the Nancy Foster in July. At 1300, the acoustic release was triggered and the mooring came to the surface. By 1400 hrs it was secured on deck and **JASON II** returned to the bottom.

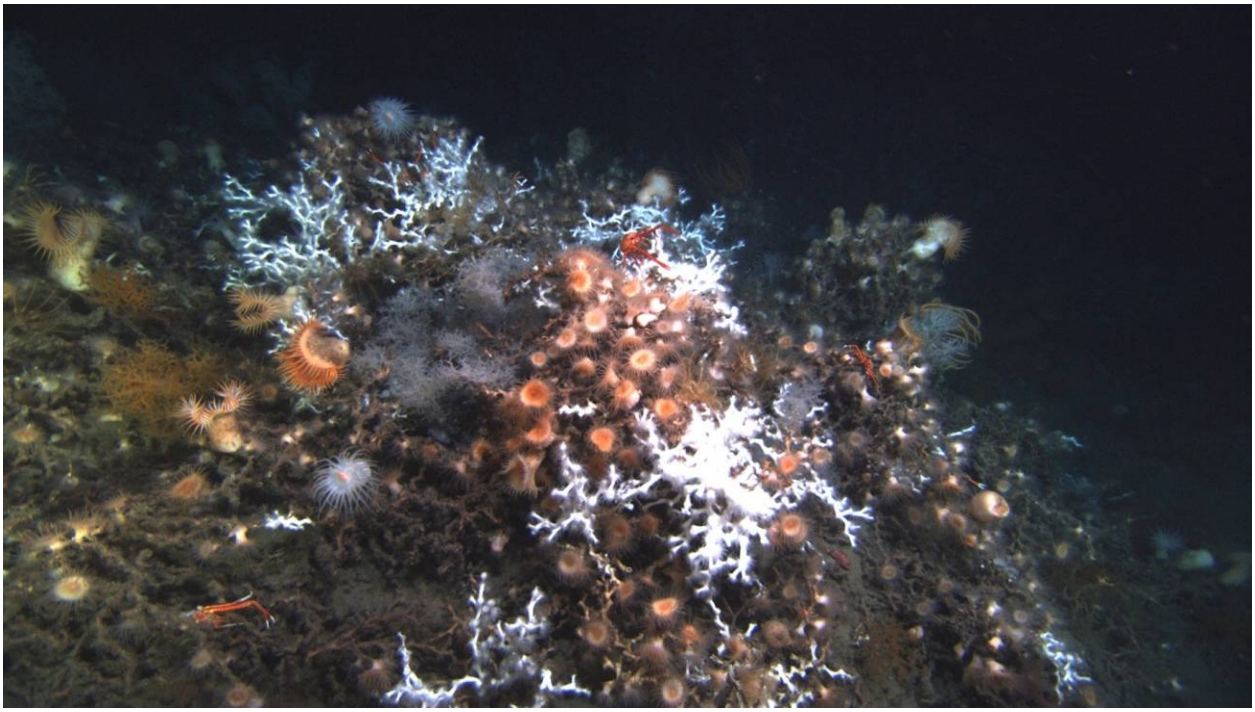

Figure 31. A large, diverse community composed of live *Lophelia pertusa*, orange and white *Leiopathes* sp., flytrap and *Actinostolid* anemones, and *Eumunida picta* squat lobsters colonizes a framework of rubble and dead coral (VK906).

Figure 32. A close-up image of a single *Eumunida picta* squat lobster perched near a number of crinoids, *Actinostolid* anemones, and live *Lophelia pertusa* (VK906).

Once **JASON II** was on the bottom, we began to run a series of 10 transect lines centered around the Roberts Reef site. A total of 10 transect lines were run between 1425 and 1730 hrs. When the transects were complete, we fired a niskin in this area off of the mound. We then began sampling for Leiopathes genetics and Lophelia live corals/genotyping once again.

Between 1745 and 2400 hrs, we completed our Leiopathes collections such that a total of 30 red and 30 white Leiopathes had been collected at this site. In this time period, we stopped at 14 different points on the seafloor, set down the blank white marker, imaged the corals, and collected form different points within the reach of the manipulator. During this time, we collected 10 pairs of Lophelia (one into a quiver and one larger piece into the biobox), 14 red Leiopathes, 9 white Leiopathes, and 4 pink Leiopathes. We then moved to the NW corner of the mound and at 2400 hrs we fired a niskin among the Lophelia, but with bare sediment directly below the vehicle. We then set down to take one more pair of Lophelia samples.

Once the sampling on Roberts Reef was complete, we moved off to the west to explore the mounds that we had not previously seen and to attempt to collect Callogorgia and ophiuroid samples. We arrive at the first mound at 0045 hrs and set down to collect a gorgonian.

J2-535: VK906/862 - DIVE SUMMARY

25-Oct: VK906/862

0400: recover JASON II
0700: meet Acadiana for at-sea transfer of personnel
1000: heading back to station
1200: CTD cast to VK 906
1600: launch JASON II

J2-535: VK906/862

Launched on Roberts Reef in VK 906 at 1100 GMT (**Figure 33**). We had a slow start on the bottom due to some issues with startup of Doppler navigation system. After sorting that out we were able to locate mosaic location 1 (which did not have markers) within about 20 minutes and deployed a marker Y then set up and repeated this mosaic, originally done in 2009. We then transited N about 10 meters and confirmed the second mosaic site and deployed marker Z in this mosaic and took a niskin water sample here. We did not repeat this mosaic, but did obtain a series of pictures as we rose above the marker in order to document the location of the marker in the mosaic for future visits. During these operations a fluid leak in starboard manipulator was discovered and this manipulator (with the cutter) was stowed for the balance of the dive. As a result, the Starboard biobox and quivers were also not usuable. We then took 4 pushcores and a niskin within 5 meters of these mosaics. After the push cores, collections of Leiopathes and Lophelia were made into RNA later and a sample of live Leiopathes was placed in the biobox. We then embarked on a search for rocks. NONE were found on top of Roberts Reef despite a serious effort. This is consistent with the hypothesis for the formation of this mound from coral skeleton. We moved to the edge of the reef top, about 50 meters away from abundant Lophelia and took 4 background push cores. Work on Roberts Reef was concluded with collection of another live Leiopathes sample and then **JASON II** was moved off the bottom and a 3 km transit to the VK 862 mound was initiated at about 0430 GMT.

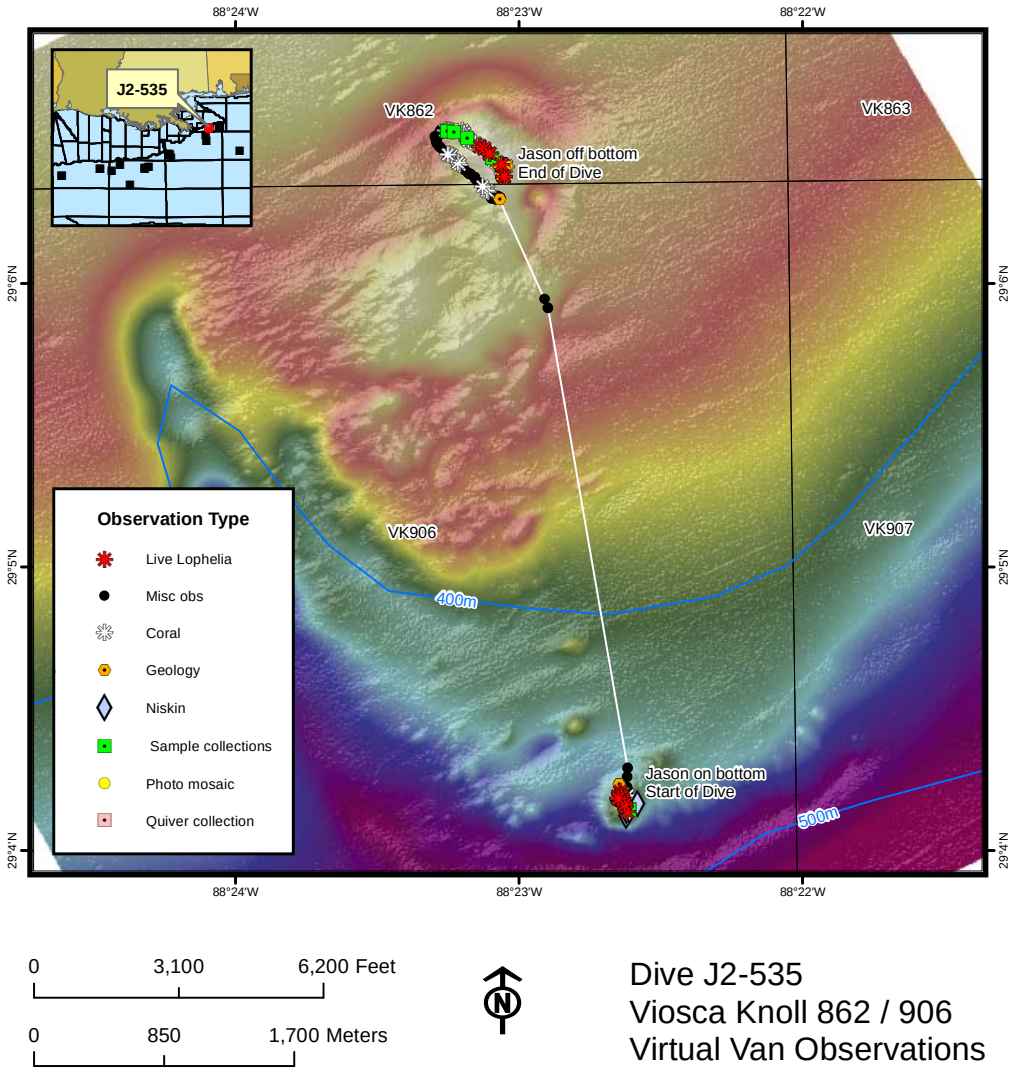

Figure 33. Events observed during lowering J2-535 at VK862/906 (inset)

At 0631, **JASON II** was back on bottom (341m; Lat: 29 6.300 N Lon: 88 23.066 W; DVDs started) after traversing since 0245. The bottom was almost entirely covered with coarse to pebbly-grained sediments. Immediately, we noted large/expansive populations of white anemones, both singly and in groups of 3 to 5. Venus fly-trap anemones (likely *Actinoscyphiaaurelia*) were also present. We traversed west north-west (~290) along an oblique ridge south of VK862. Small cup corals were occasionally observed the sediments as well. At 0652, we noted a large steel-looking cable on the seafloor, cutting through the population of anemones (noted the cable for ~30 meters). Did not observe any anemones on this cable. We traverse more northerly to follow the ridge feature (~344m) and started to see black corals (red and white *Leiopathes*; 0704) (Lat. 29 6.433 N Lon: 88 23.218 W). Our goal was to try to locate and sample *Callogorgia* and *Asteroschema* in RNA Later and for population genetic analysis. Occasional fish were observed amongst the anemones, who's distribution is almost continuous through this traverse. Black corals were observed with a

frequency of 1 to 10 per minute. As long as we stayed on the ridge, there were anemones and corals to be observed. The sedimented bottom continued and at 0735, we observed (and then sampled into the red RNA Later Chamber) *Callogorgia* with anasteroschemidophiuroid (Lat.29 6.544'N Lon: 88 23.255'W; 355m). Pencil urchins, actinostolid-like anemones, and a paramuricid coral were near the *Callogorgia*. Leiopathes and anemones dominated as we continued to search northward for more *Callogorgia*, as we were now on an easterly heading following the ridge. At 0822, we noted a large paramurcid (likely *Paramurceamultispina*) among anemones with an urchin at its base (**Figure 34**), and sampled it along with itsasteroschemidophiuroid in an RNA Later chamber (blue) (350m; Lat: 29° 6.540 N ,Lon: 88° 23.237 W). From here, we traversed on a general heading of ~106. The abundance of observed *Leiopathes*, white and red color morphs, increased to the north northeast as slopes were steeper (0910). We collected a piece of carbonate on one of these slopes and placed it behind the quivers (0912). Aneomone abundance (with slightly larger individuals) increased as did black corals and primnoid corals- creating dense fields. In fact, at 0930, we observed many color morphs of Leiopathes (red, pink/salmon, white, and orange) in a single HD image frame. At this point, we were transiting upslope to the east to southeast (general heading ~113), and started to see small stands of *Lophelia* (0932). At 0937, came across a boulder outcrop on carbonate pavement hosting a large white *Leiopathes*, *Actinoscyphia*anemones, and primnoids. Deployed Marker 28 and 0941 to set up a vertical imaging station. Imaged the large *Leiopathes* and its associates (3 Eumunida, and 2 galatheids), as well as fauna on the bolder. Heading was 156at Lat. 29° 6.460 N , Lon: 88° 23.103 W. Snowy grouper were present in this area. Less than 10 meters away was another boulder outcrop with another large Leiopathes. Less than 2 meters away we took carbonate sample #2 (0954) at 317m. We then traversed at heading ~142 to locate previous mosaic sites (specifically marked as R, S, and T). Large field of primnoids over flat-topped and cracked carbonate blocks. At 1024, sited mosaic Marker T (Lat: 29° 6.40'N Lon: 88° 23.055'W. At 1026, sited Marker 26 (Lat: 29° 6.388 N Lon: 88° 23.056'W) on a small hill with white anemones, *Actinoscyphia*, and primnoids (**Figure 35**).

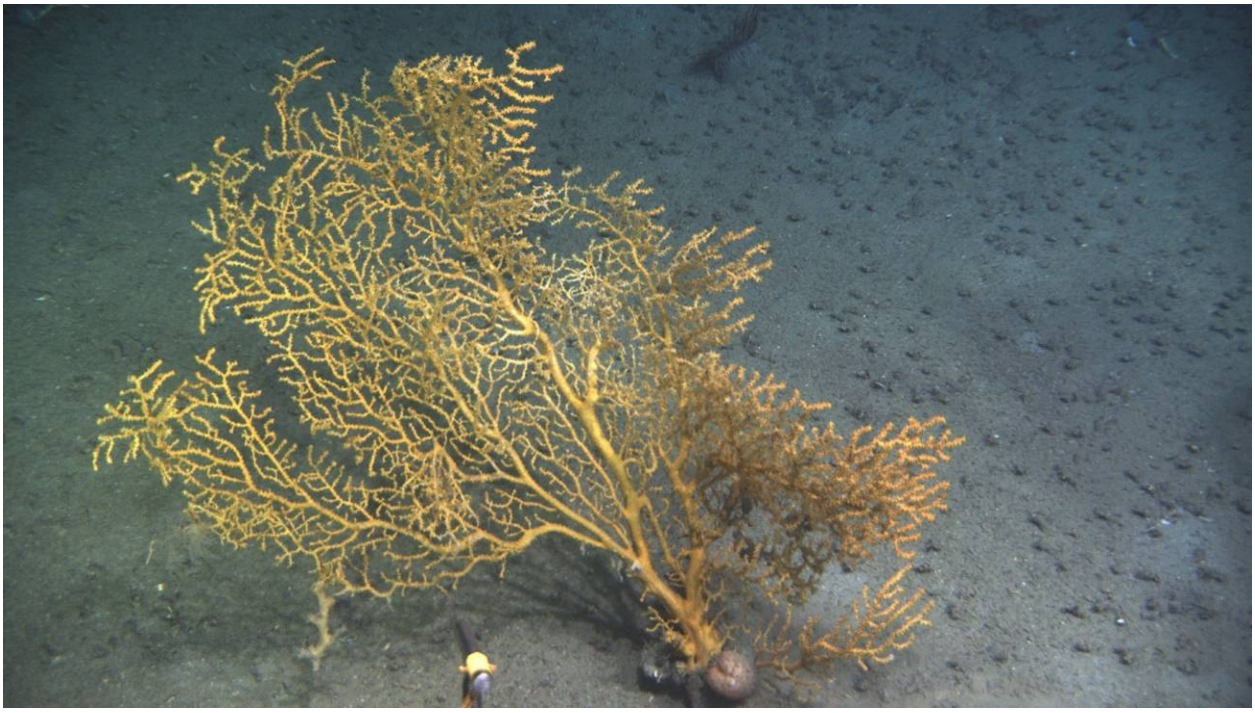

Figure 34. A large colony of yellow *Paramuricea* sp. settled on flat substrate (VK862/906).

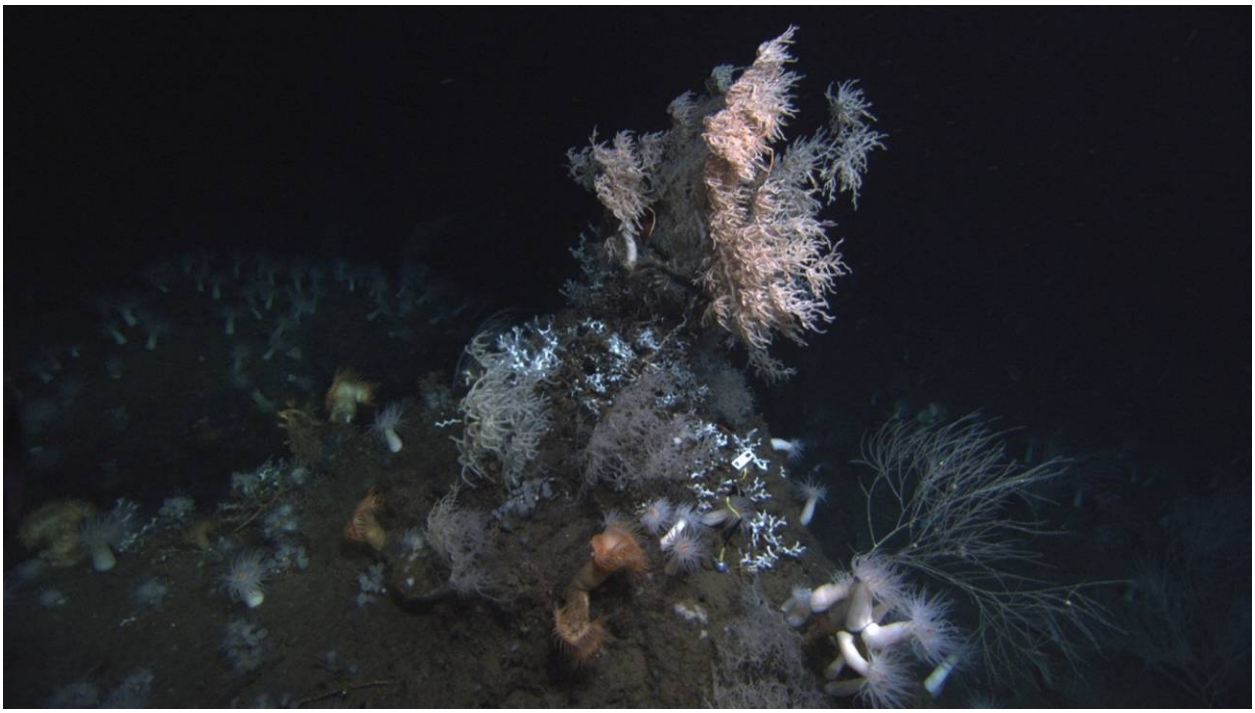

Figure 35. A large field of *Actinostolid* anemones surrounds an outcrop containing white *Leiopathes* sp., bamboo corals, and small fragments of live *Lophelia pertusa* (VK862/906).

At 1027, sited Marker R at Lat: 29° 6.383'N Lon: 88° 23.052'W (316m). Set up to start mosaic at 1041. The Marker R was completely re-mosaicked and then another attempt was made to find Marker S. It was not located so we moved back to Marker T and re-mosaicked a portion of this site. Time was running out, so 2 push cores were taken in association with this mosaic and **JASON II** left the bottom at 1200 GMT for a 0730 local time recovery.

J2-536: MC751- DIVE SUMMARY

26-Oct: MC751

0800: Recovered JASON II
0815: Begin transit to MC751
1540: arrive on station
1600: Launch JASON II

J2-536: MC 751

We launched on the coordinates for marker H and quickly found the marker and the two mosaics associated with it (**Figure 36**). Both were re-done, the niskin was fired here; we settled near the marker and gathered images for horizontal mosaics and documentation for longer term observations of this area. From 2313-2328 GMT, Amanda took 4 pushcores near marker H (440m). At 2350, at live and dead Lophelia site with Marker 8. Imaged and then left to search for Marker G, after 55 minutes of searching it was found about 20 E of where of the waypoint. This site was remosaicked (downlooking), pushcores were taken (0200), and horizontal images collected to assess coral and associate species identification and distribution for future comparisons. We then began collecting coral and associate pairs. We collected a *Callogorgia* with *Asteroschema* just away from the mosaic site (0252; 441m). Several meters away, we located a large *Callogorgia*/*Asteroschema* community (**Figure 37**), Deployed Marker 41 and collected horizontal images for mosaicking. We noted "brown detrital-like debris" on the upper branches of this coral colony and collected them for inspection. We then remosaicked the community. From 0330 to 0415, we collected Lophelia colonies to the south, followed by a muricidoctocoral with an *Asterogomphus*. Continued to see large bushes of *Callogorgia* with ophiuroids (ex. 0435and0528) as we transited north. We also encountered Marker 4, 9 and Site Marker (bucketlid) on the way north. Each of these sites contained tubeworms and Lophelia (and *Callogorgia*). At 0625, came across an area with diverse coral (with a goose fish), where we collected a paramuricid (**Figure 38**)with ophiuroids, and a *Callogorgia* with Asteroschema in RNA Later (Chamber and blender; 441m).

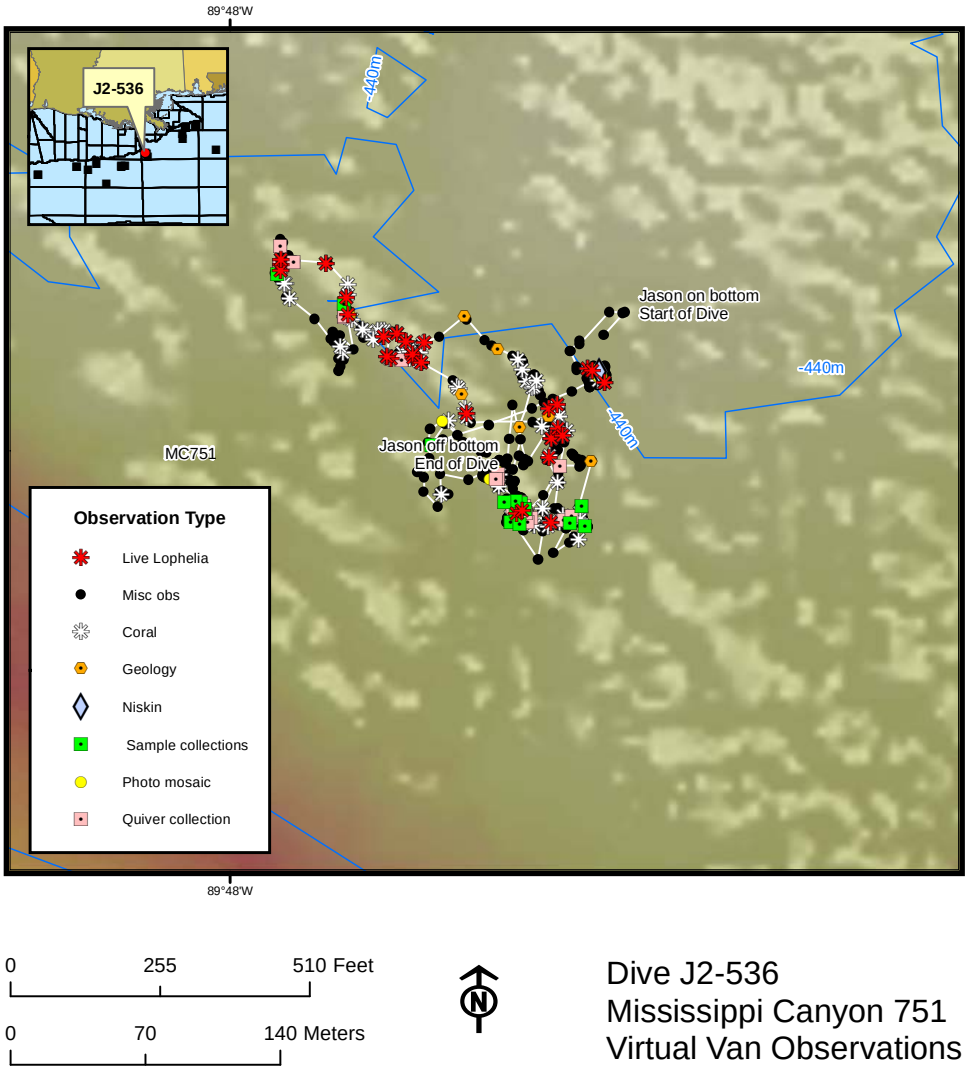

Figure 36. Events observed during lowering J2-536 at MC751 (inset)

We then began a search to the south for a mixed coral and tubeworm community to sample for a study of trophic interactions between these normally very different communities. We checked out communities near marker 4, 9 and the site marker, and tubeworms were present among corals in these two areas (marker 9 and the site marker are within 2 m of each other). Horizontal observatories were established near these markers. A suitable tubeworm-coral site was found to the S (labeled tubeworm/lophelia) and at this site we first slurped crabs and blindly from among tubeworms and adjacent corals. Two acesta and an Echinus were collected. We finished collections for this study with a "coral pot" among a mixture of live and dead lophelia with a few tubeworms intermixed. To finish the dive we collected two carbonates, one very close to the tubeworm/coral mix and one on an adjacent carbonate mound.

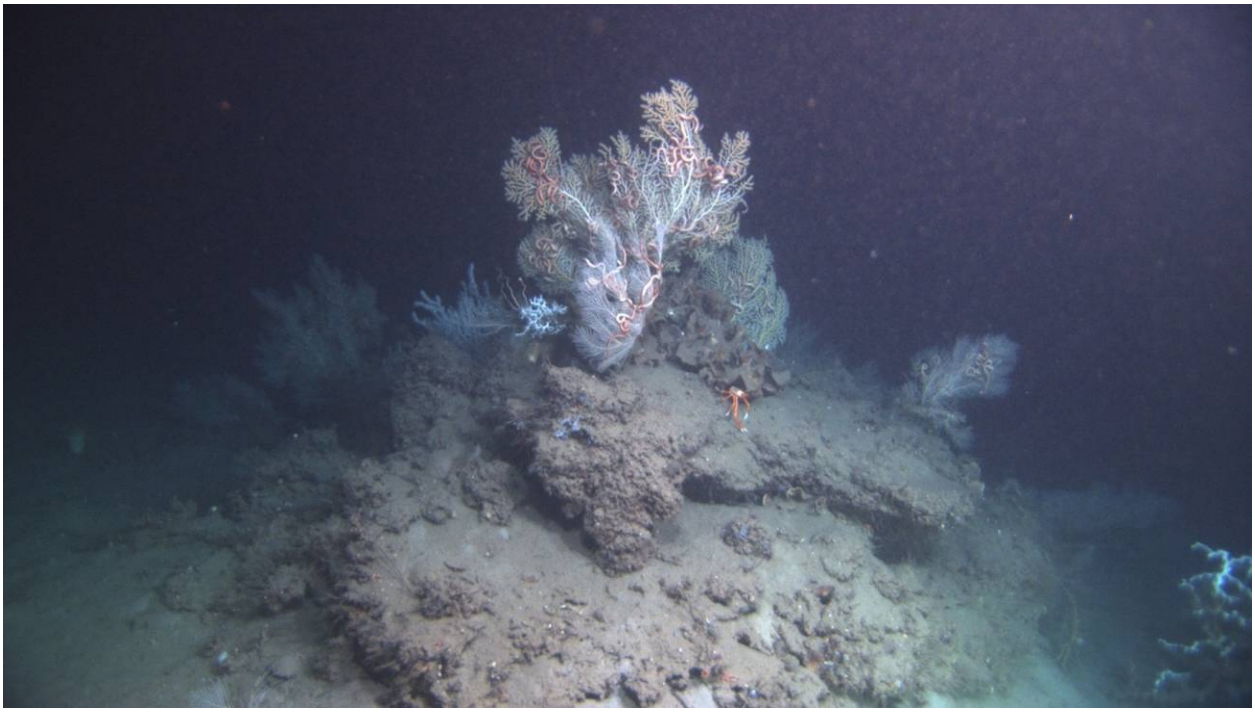

Figure 37. A large colony of *Callogorgia americana delta* and *Paramuricea* sp. in the background along with their associated *Asteroschema* brittlestars sit on top of a large carbonate mound (MC751).

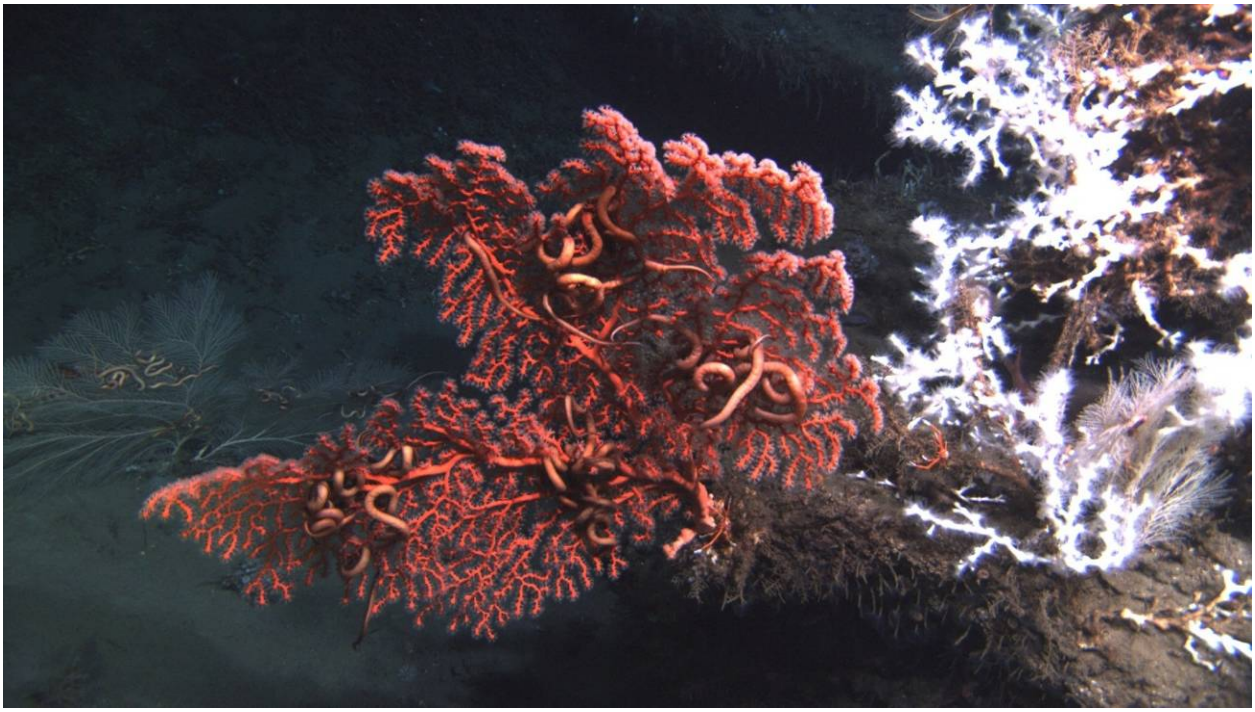

Figure 38. The bubblegum coral *Paragorgia johnsoni* grows alongside *Lophelia pertusa* and *Callogorgia americana delta* (MC751).

J2-537: GULFOILSHIPWRECK - DIVE SUMMARY

27-Oct: GulfOil Shipwreck

0800: Recovered JASON II
0830: conducted a CTD Rosette cast
1000: began a slow transit to the Gulf Oil site
1600: Launched JASON II

J2-537: GulfOil shipwreck Western Debris Field

JASON II arrived on bottom approximately 300 m west of the main wreck site to determine the origin of an isolated debris field (**Figure 39**). Once on bottom we flew a southerly heading towards the debris field. Immediately noticeable on the seafloor was an unusually large constellation of brittlestars (*Ophiacantha sp.*). Nearing the debris field we began to note small non-descript metal debris. Moving through the debris field we noted several pieces of grating, steel plate, and vent hoods indicating the wreckage is associated with the *GulfOil*.

Having determined the debris field was associated with the *GulfOil*, we began transiting east towards the main wreck site. As we approached the wreck small fragments of wreck debris were observed on the seafloor. Nearing the *GulfOil*, we noted large debris east of the starboard bow.

Reconnaissance

Arriving at the *GulfOil*, ***JASON II*** moved toward the bow to begin the reconnaissance dive. The ROV camera images show the vessel is listing to port. The port and starboard bow anchors are still stowed against the hull. At the top of the bow large *Lophelia* colonies are growing around the edge of the foredeck partially obscuring the anchor windlass and anchor chain. Hovering just outboard of the port bow in view of the deck we began to move the ROV slowly down the port side of the wreck following the deck line and watching for any potentially threatening entanglements to ***JASON II***. Although colonies of *Lophelia* have enveloped much of the foredeck (**Figure 40**), the main deck is free of any growth only along either of the ship's railings are *Lophelia colonies in abundance*. Dropping down from the foredeck to the main deck, we identified the forward mast and deck machinery used for hoisting cargo. The main hold and the two adjacent portside deck plates are buckled reflecting the force of the bow torpedo explosion.

The *Lophelia* density dramatically increases near the central deckhouse. The top of the bridge is missing, however the remaining two stories are completely overgrown with *Lophelia* to the point of being only recognizable by the outline (**Figure 41**). Part of the portside bridge observation deck has collapsed and hangs out over the portside of the hull.

Aft of the central deckhouse the partially collapsed catwalk runs back to the rear deckhouse. Dense *Lophelia* obscures much of the catwalk structure. The mainmast, like the foremast, is lying across the deck pointing toward the bow. Small winches and valves remain in place along the deck. Another two missing deck plates in line with the collapsed catwalk suggests the position of another torpedo explosion.

Continuing aft toward the stern we noted that the ship's funnel is missing. The aft deckhouse is intact but like its counterpart forward is covered in *Lophelia*. A box of empty 4-inch deck gun casings is strewn across the port stern deck. The areas of exposed steel railing and superstructures at the stern are also heavily overgrown with *Lophelia* obscuring much of the structural details here. Moving around the stern we saw the name *GulfOil* arched across the transom, partially hidden by *Lophelia* hanging over the stern railing. Pointing aft off the stern, sits the defensive 4-inch deck gun on the fantail deck. At this point the hull is buried the seafloor up to the rudder head leaving only 2 m. of relief.

Moving around the stern we continued our recon up the starboard side of the wreck. The heel of ship exposes a greater portion of the starboard side. Moving forward we passed the remnants of the catwalk, central deckhouse, and railings all covered in Lophelia with little evidence of entanglement. Forward of the central deck house we saw the top of the torpedo damage in the starboard hull. We continued forward imaging the starboard main deck before returning to the bow to begin the profile mosaic. Because of the higher risks of entanglements on the port side and the necessity to document the torpedo damage areas, project biologists and archaeologist agreed to mosaic the starboard profile of the *GulfOil.*

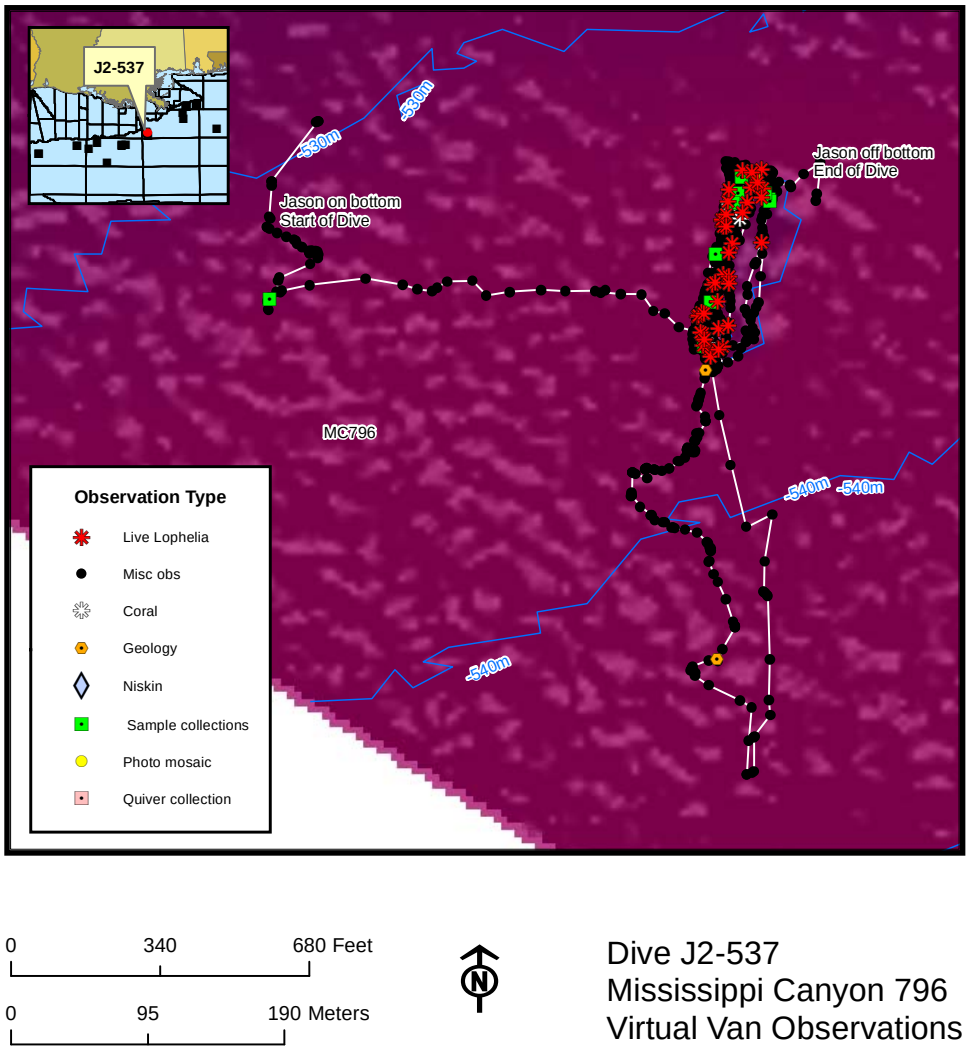

Figure 39. Events observed during lowering J2-537 at MC796 (inset)

Setting up on the starboard bow we ran several mosaic test lines to determine the best way to approach the mosaic and fine tune the automatic image timer on ***JASON II****'s* high-definition camera system. Ultimately, we opted to run lines vertically capturing stations along the hull, instead of horizontally capturing sheers. We began profiling the hull at 0:38 GMT. Moving from the bow to stern we ran 35 vertical lines at 4 meters intervals to provide sufficient overlap in imagery. Images for each line were collected at 15 second intervals. Minute adjustments of 2-5 degrees in ***JASON II****'s* heading, kept the ROV perpendicular to the hull. We completed the profile mosaic at 4:35 GMT, and then came up into position above the stern aligned to the centerline of the shipwreck. Running 4 m. off the top of the deck we flew two transects down the length of the ship to either side of the centerline. All mosaics were completed by 5:38 GMT.

Following the mosaic we collected detailed imagery of specific wreck components and features. While collecting images of the torpedo damage on the starboard hull forward of the deckhouse we located the remnants of the ship's funnel outboard of the starboard bow. The funnel has collapsed on itself with only the base ring remaining upright on the seafloor at the base of the funnel. The funnel ladder and ship's whistle are still intact and clearly visible on the side of the funnel. We completed the detail imagery at 0800 GMT.

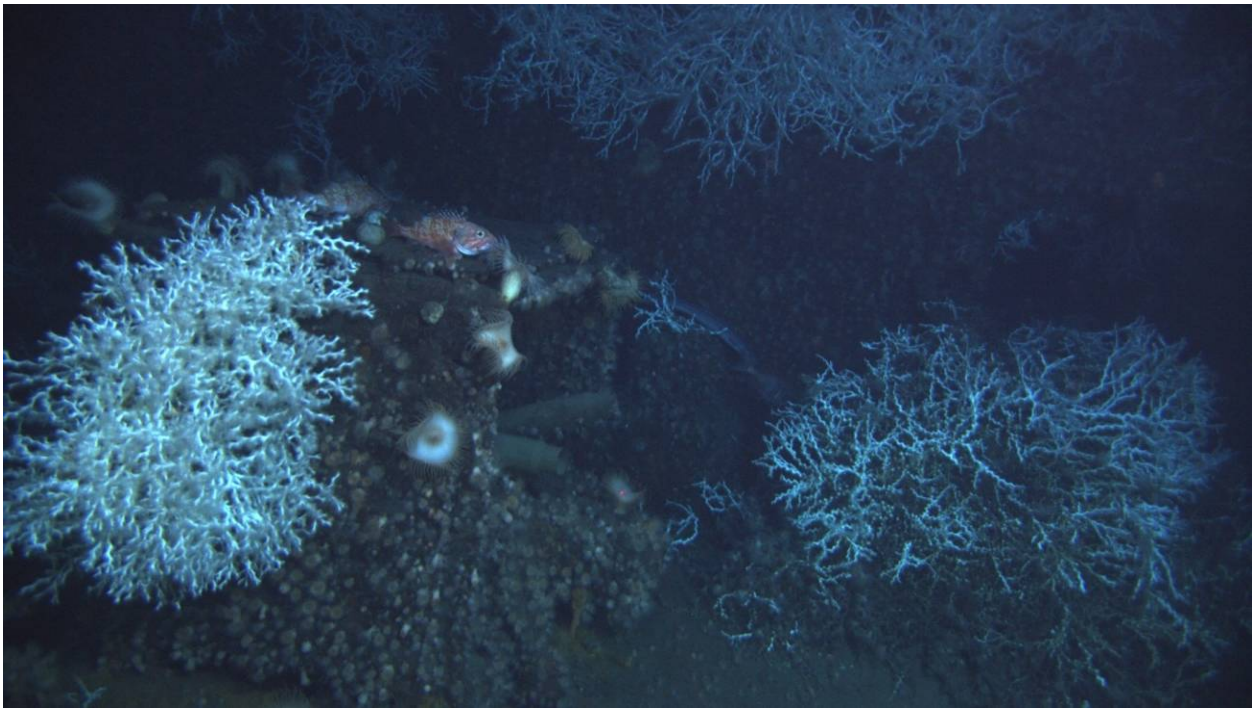

Figure 40. A single black-bellied rosefish swims through thickets of *Lophelia pertusa* growing on the artificial substrate provided by the *Gulfoil* shipwreck (Gulf-Oil).

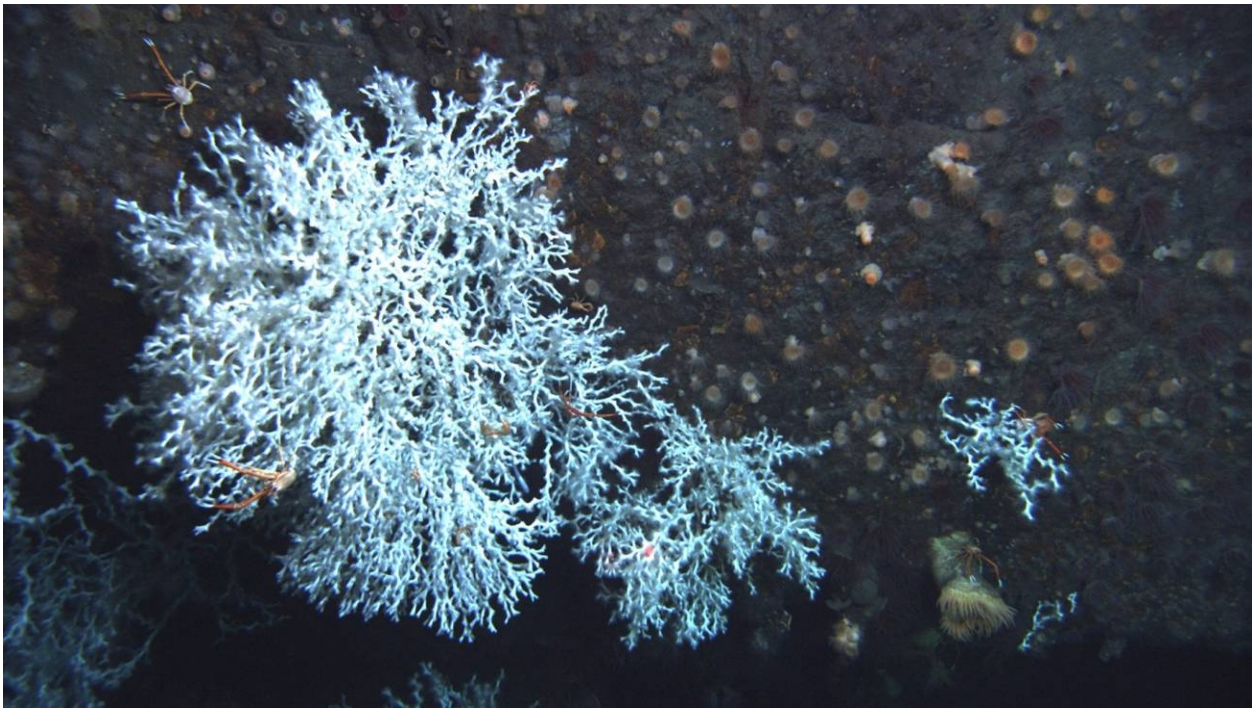

Figure 41. A large thicket of *Lophelia pertusa* grows amidst a field of *Actinostolid* anemones on the hull of the *Gulfoil* shipwreck (Gulf-Oil).

At 0800 GMT the chief scientist was notified that the archaeological survey of the *GulfOil*main hull was completed. The next task was to determine the extent of the southern debris. ***JASON II*** took up position at the bow of the *GulfOil* then proceeded on a southerly heading into the debris field. Moving through the debris field, we noted non-descript hull fragments, structural components, and a single 55 gallon drum in direct association with a vent hood. The debris scatter ended at approximately 230 meters south of the wreck. After reaching the limit of the debris field we reversed course heading back through the debris field towards the main hull. On this course we observed more non-descript hull fragments as well as the remnants of a modern sea or weather buoy that is intrusive to the site.

We arrived back at the main hull site between approximately 0930 and 1000 GMT. At this time the survey was turned over to the Chief Scientist to carry out the biological objectives at the site.

The first biological objective was to pick a portion of the hull with representative biological communities and gather the imagery for a higher resolution photo-mosaic to next within the mosaic of the entire ship. We chose an area over the largest torpedo hole in the hull because there was a combination of dense lophelia, sparse lophelia, and anemone coverage in this area. A portion of the hull about 8 meters long was imaged from the rail down to (and around) the hole in the hull. After this we did some targeted imaging designed to allow measurements of lophelia growth away from substrate for estimation of maximum

growth rates of some of the larger colonies encountered. After about one hour of these measurements, the vehicle was turned over to our USGS partners for collection of lophelia samples for genetic analyses (taken from colonies in the sediment below the ship to avoid ALL impacts on the wreck) and push cores from areas close to the corals. Shortly after the minimum number of genetic samples had been taken (10) we were told that we would have to surface in 15 minutes to avoid recovery during an oncoming storm. Push cores were quickly collected near the Lophelia on the sediment under the ship. As a result of the early recovery, we were not able to: Complete the planned genetic collections (10 more were desired), take the control push cores away from the ship, or complete the planed additional biological photo mosaic and additional measurements for growth planned with the down looking digital still camera. We also did not conduct targeted fish transects away from the ship, however, as part of the investigation of the two debris fields several hours of down looking HD video was obtained away from the wreck and this should make a robust comparison to video obtained during the survey of the ship.

One aspect of the wreck that impressed all biologists was the mono-culture nature of the colonial cnidarians. None of us noticed any colonial cnidarians except Lopheliapertusa. And there was more Lopheliapertusa on the wreck than at any of the coral sites we have discovered in the central Gulf of Mexico. Some of the sites in VK and on the W FL slope may have similar numbers of colonies, but now show the density seen over parts of this wreck.

J2-538: MC118 - DIVE SUMMARY

28-Oct: MC118

1200: JASON II was recovered early because of storm front moving toward the Brown at high speed. After recovery, the USBL pole was secured and the ship began its transit towards MC 118

1930: Arrived on station at MC 118. WOW (Waiting on Weather). Decision was made to delay the dive until at least 0800 Friday and the ship preceded to multibeam the NRDA survey sites within 15 miles of the DWH.

29-Oct: MC118

0000: Multibeam of NRDA sites is continuing with likely finish of all sites before noon

0600: Decision made to delay dive until at least 1200

1200: Multibeam complete, on station, WOW: Seas are calming, but wind would complicate a launch. Since both seas and winds are dropping quickly, the decision is made to postpone launch until 1600.

1600: Launched JASON II

J2-538: MC 118

This dive is to MC 118 (**Figure 42**), the Ole Miss Hydrate Observatory Site. This site has been well mapped by AUV and numerous ROV and JSL dives since 2005 and numerous geophysical, geochemical and microbiological instruments are on the sea floor. This site has not been well studied by macrobiologists and we have established collaboration between our team and Ole Miss to combine forces and add macrobiological observatory stations to this area. An interdisciplinary graduate student from The University of Rome,

La Sapienza who has been working at Ole Miss is on board for this collaborative project. MichelaIngrassia led the dive to MC 118 and was present in the **JASON II** control van for the entire dive.

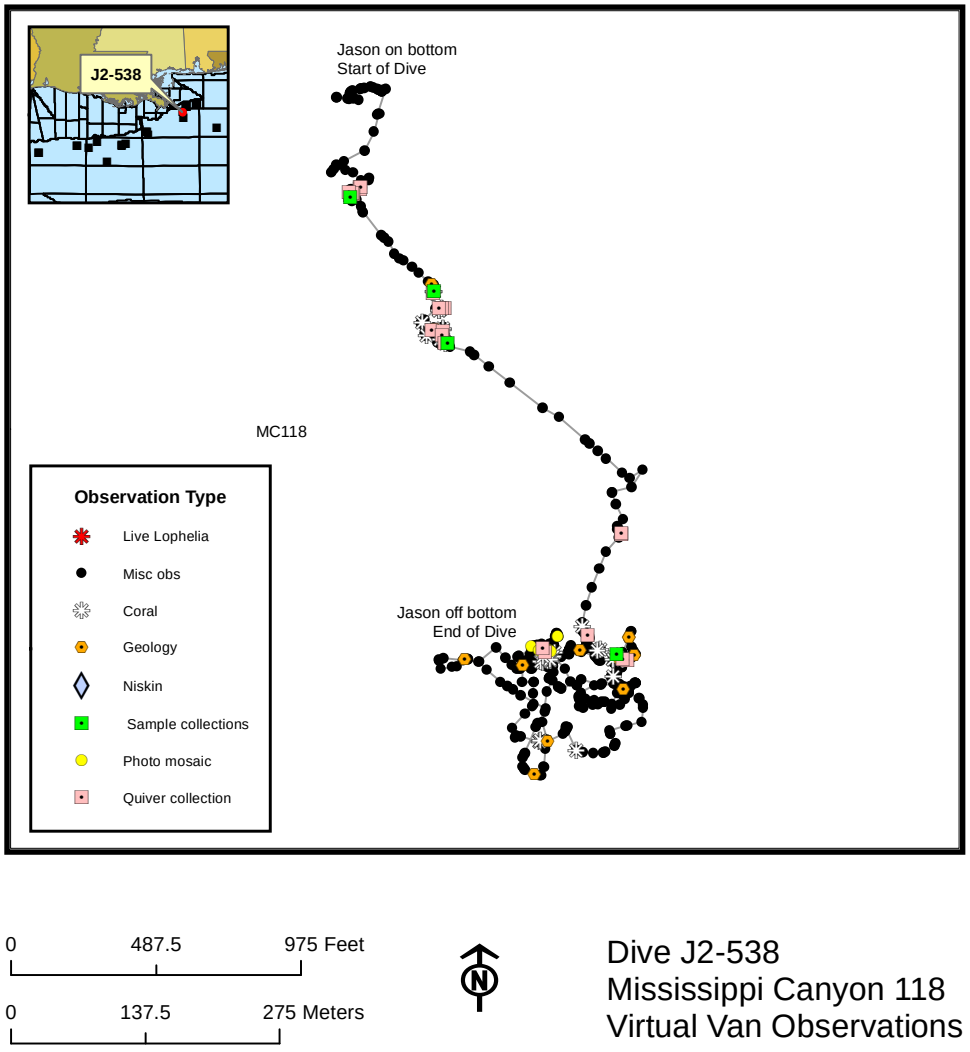

Figure 42. Events observed during lowering J2-538 at MC118 (inset)

We began the dive looking for the northern most instrument ("CSA") deployed at this site and found it within 5 meters of where we expected in our navigation net. There was some confusion as to whether this was the expected instrument for this location, but we documented the position and state of this instrument and then proceeded to the predicted location of the PFA instrument and similarly located it very close to its expected location. This was very encouraging as there is one (~60-tall) mooring we must avoid when we reach the most active areas of this observatory. The northern-most "coral site" was then visited, but upon closer investigation (and careful imaging) we discovered that what had been suspected to be a small whip coral in this area were actually pogonophorans. We did encounter a field of clams here, with many live *Calyptogena*

ponderosa, and obligate seep clam with sulfur-oxidizing symbionts. This collection was also consistent with the presence of the chemoautotrophic pogonophorans in this area. Several were collected, along with push cores in this habitat. We then proceeded to the South to an area with abundant *Paramuricea* (**Figure 43**) with numerous individuals of Asteroschemaophiuroids on each colony, mostly attached to carbonate boulders. Marker #43 was deployed among the first 3 of these sited and small samples were taken from the colonies to confirm their identification. We also sampled 2 individual ophiuroids from these colonies. By chasing sonar targets in this immediate area many more large and impressive colonies of this species were confirmed on the carbonates and imaged. We also observed and collected one *Chrysogorgia*sp. Also abundant in the area were golden crabs, and one was sampled (primarily for population genetic analysis of it's barnacle population) and *Acesta* (two of these scallops were sampled, primarily for stable isotope analyses and for NRDA analyses of hydrocarbon load). A large dead Madrepora colony was found and sampled and shortly after. A moderate-sized colony of live Madrepora was found on the edge of this boulder field, and Marker # 42 was deployed and this colony imaged.

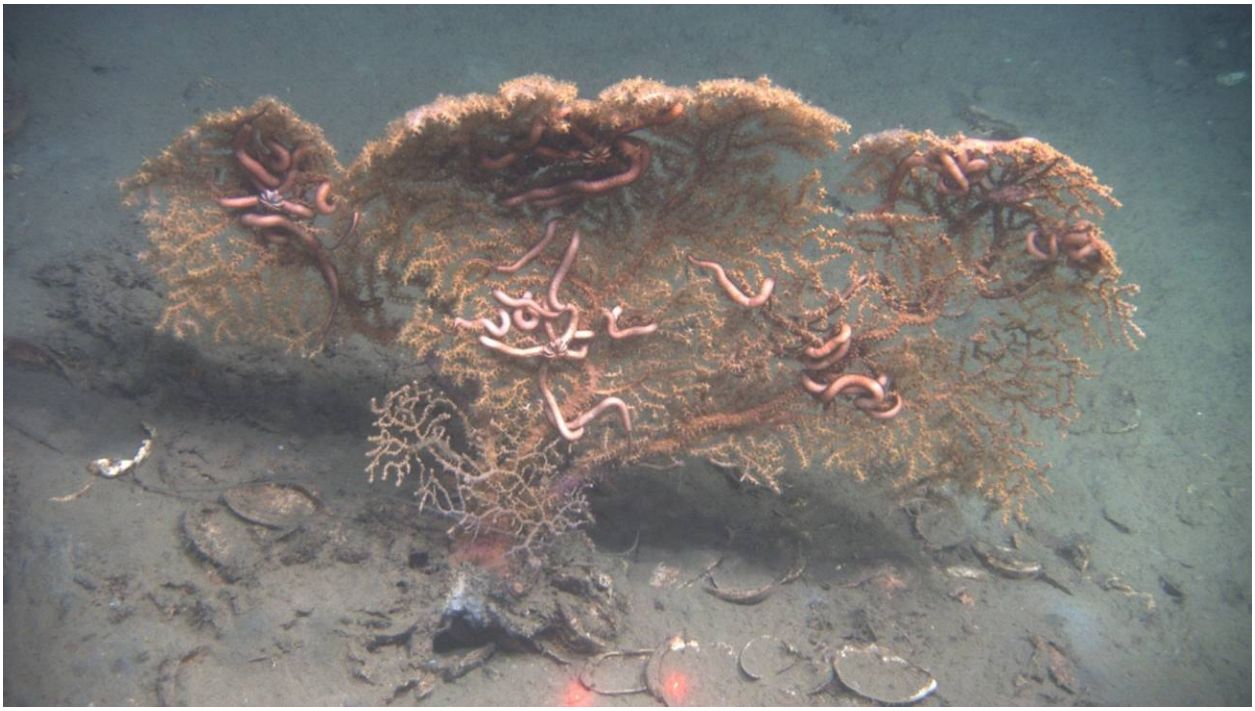

Figure 43. A single large colony of *Paramuricea* sp. is seen along with a number of its associated *Astroschema* sp. (MC118).

We then proceeded north following sonar targets and looking for a previous Marker 9, as gorgonian corals are reportedly near this marker. We noted dark gray/black patches in depressions, areas of brine seepage, and observed small gastropods as the dominant fauna (these were collected at 0331). We continued north and observed paramuriceids growing on bits of hard bottom surrounded by sediment (sampled these at 0351), and encountered Marker 6 deployed Sept 6 (monkey fist and rope) at 0407. From here, we drove west to

discover a large area containing many colonies of Madrepora (0420; dropped a DVL target here to come back to later), live and dead patches with shell debris around the base as well as chrysogorgid corals hosting shrimp and crabs. At 0513, we located a Mooring 60m tall that was deployed here in 2010 (mooring was imaged). At 0545 (886m) we discovered Marker 9 (a meter-long line with a ball of rope at the top). No corals were in the immediate area. We proceeded north to find small clam shells on the sediment and a unused push core on the seafloor (0550). As hard bottom rocks became more prevalent, we observed and collected several paramuricids and asteroschemids, urchins, more Chaceon crabs with barnacles on their carapaces, and urchins. Noted the presence of hagfish and holothurians (white) over the sediment. We also came across small patches of brine at 0622 and 0626, and then small tubeworms at the base of carbonate outcrops. Further outcrops to the north harbored paramuricids, ophiuroids, urchins and more crabs. At 0653, we reached a hydrate area with bubbles rising from the sea floor and yellow frozen methane in overhanging cracks in the carbonate (**Figure 44**). The hydrates were occupied by ice worms (*Hesiocaeca methanicola*) and covered by bacterial mat (*Beggiatoa sp*.). Bivalve shells littered the surrounding area, and small gastropod snails were observed near the hydrate. Here we dropped DVL target #29. Less than ten meters away, we encountered a small outcropping of (white and pink) Madrepora adjacent to a carbonate ledge. North of this was a sedimented region, mottled mud, that hosted some seastars, fish, broken shells, and Chaceon crabs.

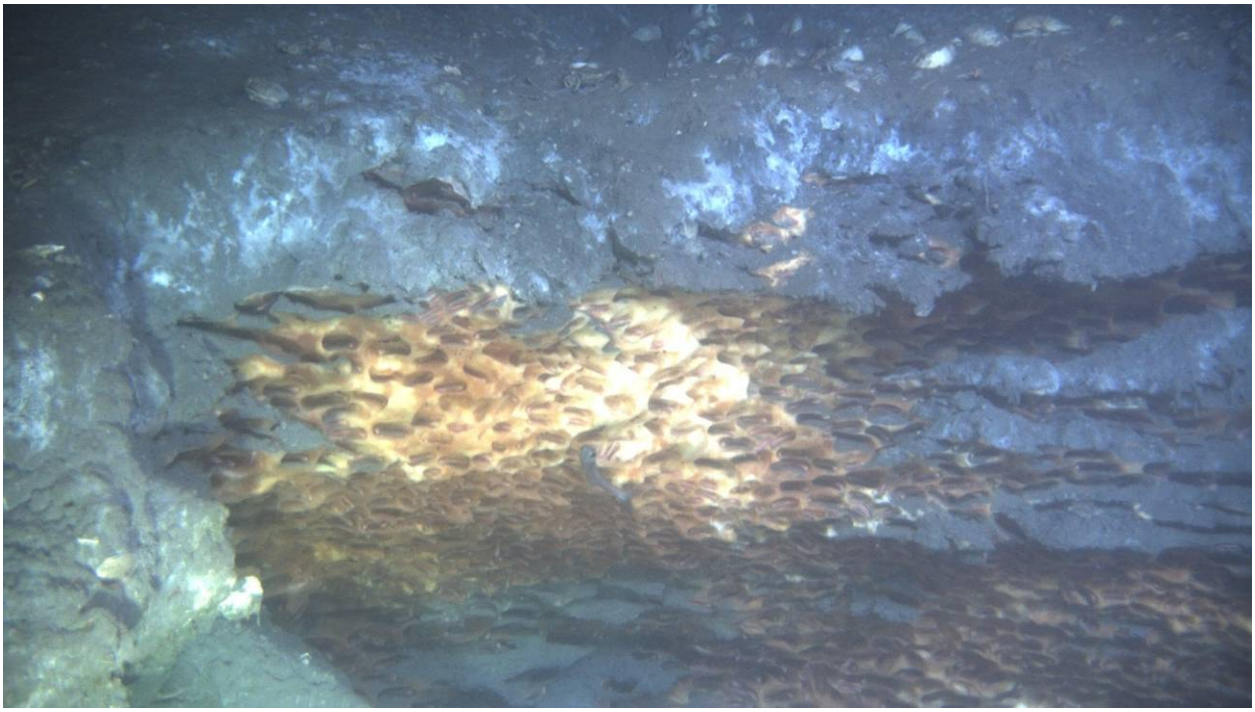

Figure 44. An exposed surface of methane hydrates reveals a dense colony of polychaete ice worms (MC118).

We ended the dive by returning to the area with the most extensive Madrepora development and established two observatory stations, each of which included down-looking mosaics and horizontal documentation of selected colonies. One station was marked with marker X and the other with T1. Both mosaics included multiple impressive colonies of live Madrepora with areas of dead coral skeleton surrounding the live corals. After the documentation we attempted to make mussel pot collections on the edges of the mosaics in areas of predominately dead skeleton, but found that the growth form of Madrepora here (very planar) prevented efficient collections with our coral pot devices. (The robust and relatively flat surfaces of prone colonies did not yield much material into the pots.) Because we did not want to significantly impact these areas we chose to limit our collections to small pieces of coral laying on the ground (for genetic identification) and push cores on the edges of the mosaics. All of the biologists were impressed with the planar nature of these colonies and the apparent age of the impressive plates of live coral. We are speculating that this planar growth form may be genetically distinct from Madrepora in the Atlantic and even what we have seen and sampled at other sites in the Gulf of Mexico. There was more live Madrepora at this site than any other we have visited in the Gulf. Also very impressive at this site were the numbers of golden crabs, that were associated with most habitats here and especially abundant in association with Madrepora.

J2-539: DC673 - DIVE SUMMARY

30-Oct: DC673

0800 Recover JASON II head to new Desota Canyon site (80 miles away)
1430: Arrive on station and run a W to E multibeam line over the station.
1620: Launch JASON II

J2-539: DC673

The dive started slowly because of several issues with **JASON II** that needed attention early in this much deeper dive than previous work. As we were descending down the escarpment, it was noticed that navigation placed Medea over 50 meters away from its expected location under the ship and this nav issue was investigated and trouble-shot throughout the dive. As a result, **JASON II** was located under the stern of the ship and our primary navigation tool was the doppler velocity log with resets under the stern of the ship. Bathymetry was not consistent between the 3D seismic map and the multibeam we used as an underlay (3D seismic indicated about 200m greater depth then the multibeam). **JASON II** depth gauges agreed with the multibeam. The starboard arm developed a ground fault during descent and could not be used throughout the dive. As a result, use of the mussel pots was not really possible (no antirotation ram on the port manip and no use of the stbdmanip for anti-rotation). Science activities commenced at about 1800 local time. Nonetheless, after a slow start we had a very successful and biologically exciting dive (**Figure 45**).

We began the dive at the base of the escarpment at about 2600m and landed in an area with massive carbonates surrounded by sediment, finding tubeworms around the base of the first carbonate visited and a *Bathypathes* on top of the carbonate. The Bathypathes was

collected. We then proceeded to survey the area and first collected a small aggregation of

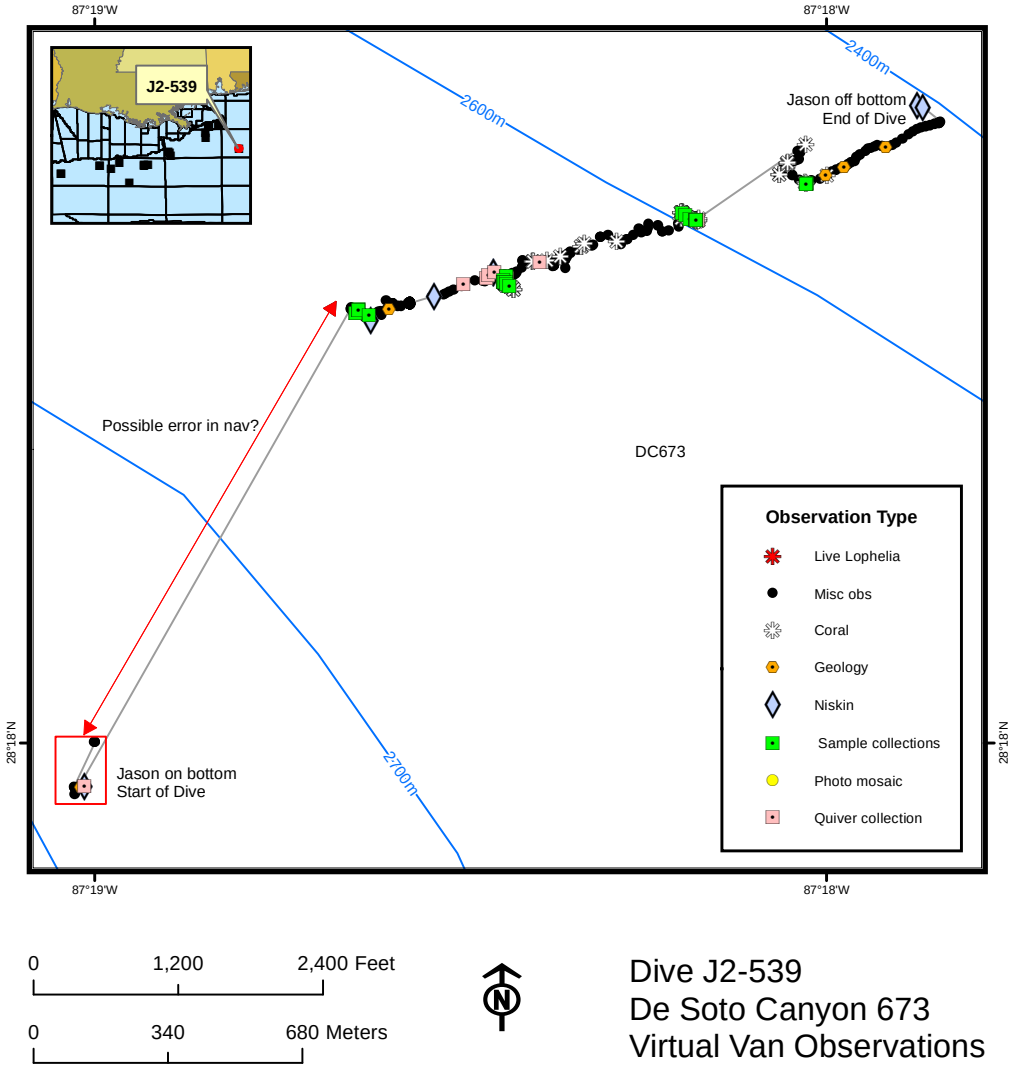

Figure 45. Events observed during lowering J2-539 at DC673 (inset)

tubeworms into the port biobox, then later a mixed aggregation of tubeworms and mussels into the starboard biobox. Tubeworms in the second collection had very impressive roots. We then took push cores in this area and collected some carbonate samples. We continued to survey for mussel beds (because of the new species found in the other DC site in 2009). We encountered a large aggregation of tubeworms easily accessible for slurp samples and slurped shrimp, crabs and 3 holothurians from within the tubeworm aggregation in sufficient numbers for population genetic analyses to test our hypothesis that this area may be genetically isolated. At this point the decision was made to begin our transit up to the first way point approximately 200m up the escarpment. After approximately 20 minutes a mussel bed was spotted in a ravine of sorts and upon closer examination was found to be a bed of mostly dead mussels below a very impressive seep feature with live mussels covering an extensive area over an apparent 8 m Vertical crack in the wall, surrounded by a

ring of thriving tubeworms. This large and cohesive community was imaged extensively before collections began. In addition to the impressive mixed community a very photogenic octopus formed a focal point for these images (**Figure 46**). We settled in to make some slurp and mussel collections and a spotted a zoarcid fish. We were able to collect this fish with the slurp sampler, along with many individuals of what appeared to be two species of shrimp and a few galatheids, all directly associated with the tubeworms and mussels at this very active seep site. Because fish in this family are often vent endemic and a species was described from the seeps on the upper slope, we hypothesize that this may also be an undescribed species. Also very impressive at this site was the coverage of polyps on the tubeworm tubes: what appeared to be zoanthids and a hydra-like species. We ended our collections at this site with a scoop of large mussels from the vertical face of the wall, fired another niskin and resumed our transect up the escarpment.

As we transited up the escarpment, we encountered a diversity of gorgonians, starting mostly with bamboo corals, then paramuricids (**Figure 47**) with ophiuroids, and at least two black coral species (perhaps *Bathypathes* and *Stauropathes*). These species were mostly observed along the wall face, and many observed on top of the escarpment. We noted a strong current from the southeast and it appeared that most of the corals were attached to the wall facing the current. Three species of bamboo corals were abundant along the wall at ca. 2380-2400 m, including a *Lepidisis*whip coral and 2 possible *Keratoisis*spp. Along the wall, we also observed and collected *Bathypathes, Chrysogorgia*, *Acanthogorgia, Paramuricea, Sibogagorgia*and *Corallium.* A few associates were observed on the corals, including a brittle star *Asteroschemaclavigerum* on the *Paramuricea*and a shrimp on the *Chrysogorgia*. Overall, however, associates were not commonly observed. We noted that this was the first time during this 2010 cruise that most of these species were collected and observed. Our impression was that the octocoral community structure was similar to that observed at DC583 in 2009.

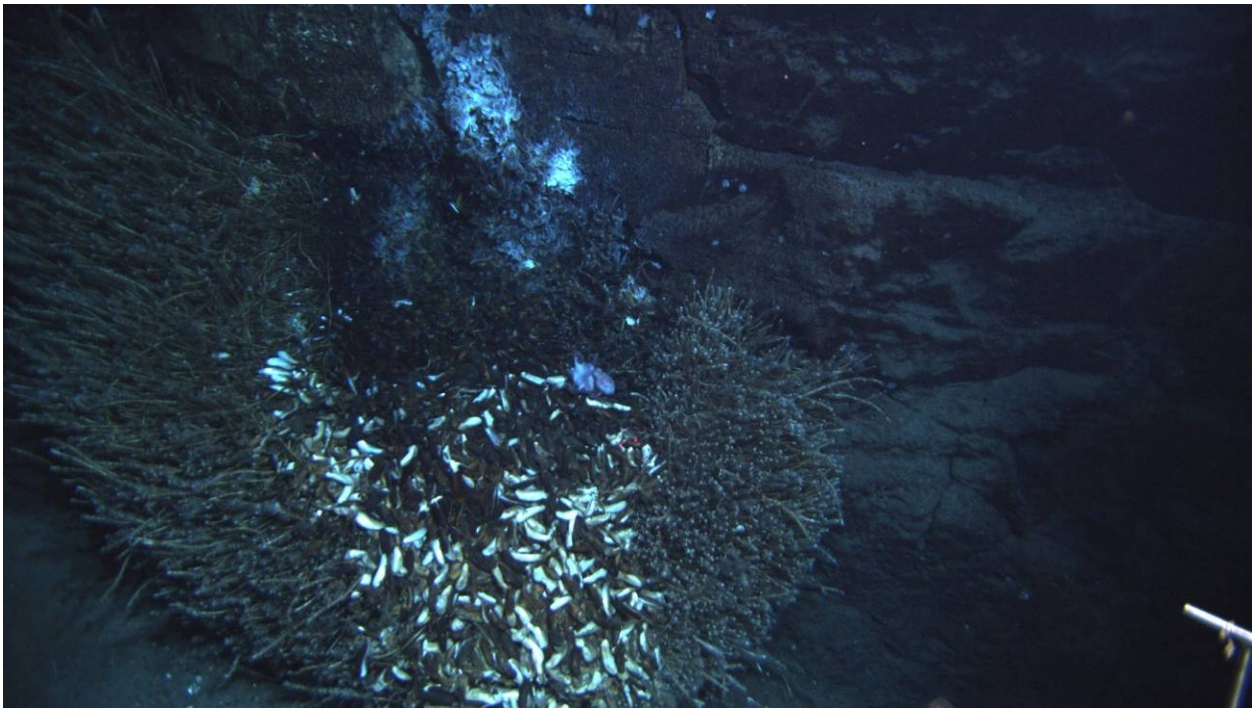

Figure 46. An octopus takes refuge in a dense tubeworm bush and mussel bed (DC673).

Figure 47. A single *Iridogorgia* sp. is seen settled on a rocky outcrop surrounded by a few small colonies of *Paramuricea biscaya* (DC673).

We then headed to hard target #2 around 0730 local time, transiting over mostly mud. At times, a low relief outcrop/boulder was observed with white sediment accumulation around the base. We reached a second ridge at ca. 0330 local time. This ridge was at ~2250

m depth and was also covered with similar corals as the first ridge encountered. However, we did pick up a few more coral species, including two species of *Iridogorgia*and an additional paragorgid. We spent ca. 2.5 hrs at this ridge and then continued to move upslope. We transited over mostly mud bottom with scattered rock outcrops/boulders and collected a *Bathypathes*, a *Paramuricea* with an *Asteroschemaclavigerum* associate, and arock in this area. We left the bottom at 0650 local time anticipating an on time recovery on the surface and on the way up we fired a niskin at 2000 m and another at 1233 m.

J2-540: VK826 - DIVE SUMMARY

31-Oct: VK 826

0800: recover JASON II and move to VK 826 (60 miles away)
1600:launch JASON II

J2-540: VK 826

This will be our last dive at a site with the main organisms for laboratory study associated with this program and extensive genetic and live animal collections must be completed before leaving the site. Our plan was to dive until all objectives were met so we would have the option of skipping a second dive to this site if the live animals we collect remain in good shape and we obtain sufficient numbers for the planned studies.

The sub was launched over the coordinates of Mosaic Q and we spent most of the first watch working on problems with the tether, navigation problems, and then looking for our marker in the wrong location (from incorrectly communicated numbers). We then proceeded north (**Figure 48**) and while looking for T3 determined that the location we had for Markers Q and O were incorrect, but our T3 location numbers were good. We recovered the T3 temperature recorder deployed last year and then transited up to Marker O (which was found quickly with the correct numbers) and we redid this mosaic for comparison to last year and the July NRDA cruise.

The two biggest challenges we expected during this dive were locating and collecting pieces of sufficient numbers of white *Leiopathes* (27 needed) and paired samples of *Callogorgia*/*Astroschema* (5-10 needed) for the planned population genetics work. After completing the mosaics we began working to the West and then South visiting known (and suspected) locations for these samples.

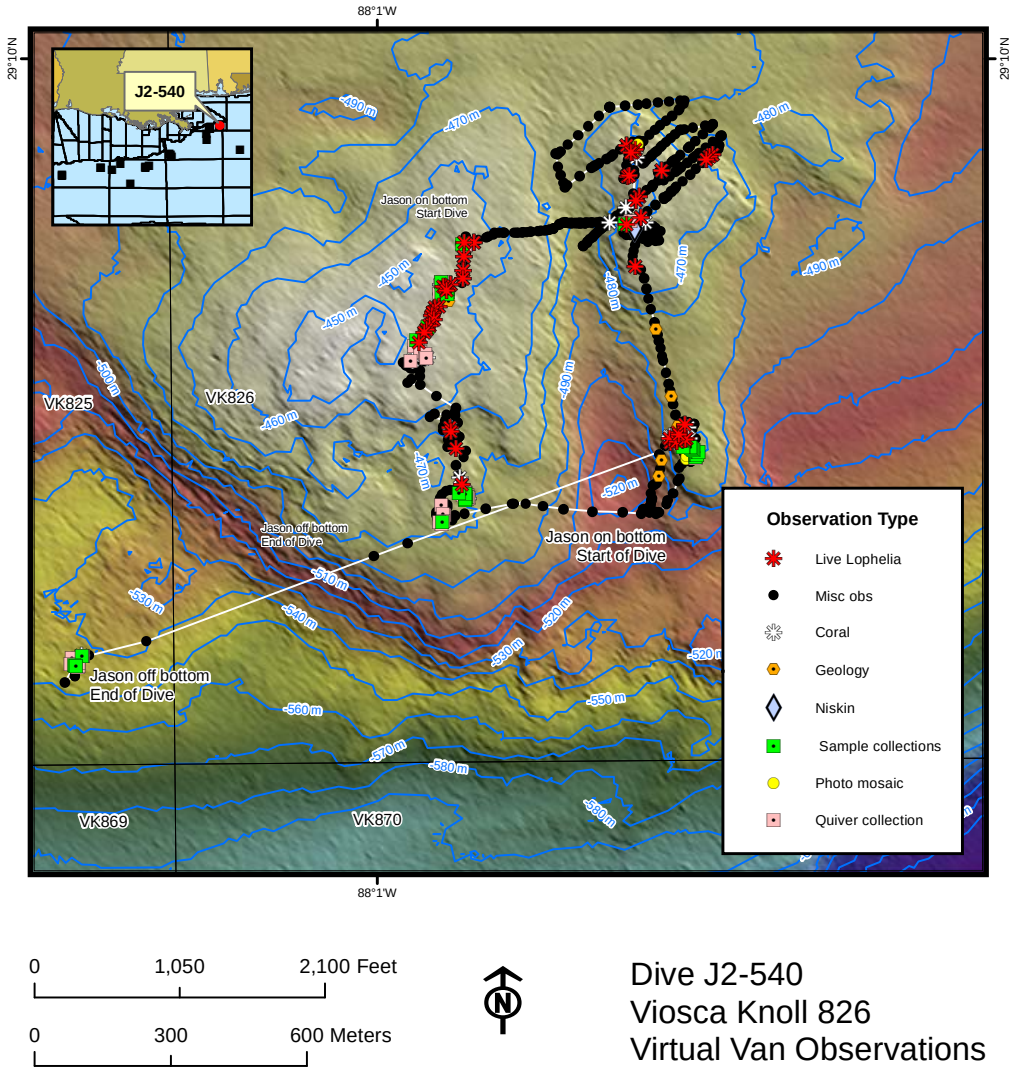

Figure 48. Events observed during lowering J2-540 at VK826 (inset)

We transited west across a small ridge to a known location where *Callogorgia* were known. We surveyed this site and realized that no *Callogorgia* had any associates on the colonies. Therefore, we continued south towards a known *Leiopathes* area (**Figure 49**). After completing the Leiopathes collections for live animal and genetic studies, and RNA-later collections of all target species, we returned to Marker Q, which was quickly located with the correct coordinates, redid this mosaic and then made the remaining paired genetic/live *Lophelia* collections for return to Temple and laboratory studies. After the final Lophelia collection (**Figure 50**), we suction sampled for about 20 minutes to obtain galatheids and shrimp for the aquaria at PSU and Temple. We then went into "lay back mode" with **JASON II** while the ship moved at .75 knots from our location in the SE corner to the extreme SW corner of the VK 826 site where we had found *Callogorgia* with *Astrochema* brittle stars at the very start of a dive in 2009 at a base of the slope. After a 1.3 km transit we landed in the midst of numerous colonies of Callogorgia with associated brittle stars attached to carbonate outcrops. We were successful in collecting a

~dozen *Callogorgia* and brittle star samples over the following 1.5 hours before leaving the bottom. We noted a PSU marker #9 across the carbonate platform that was lined with Callogorgia. We deployed a genetic marker that served as a scale for forward-looking imaging as well. We took some horizontal images of the many *Callogorgia* on this platform for long-term monitoring.

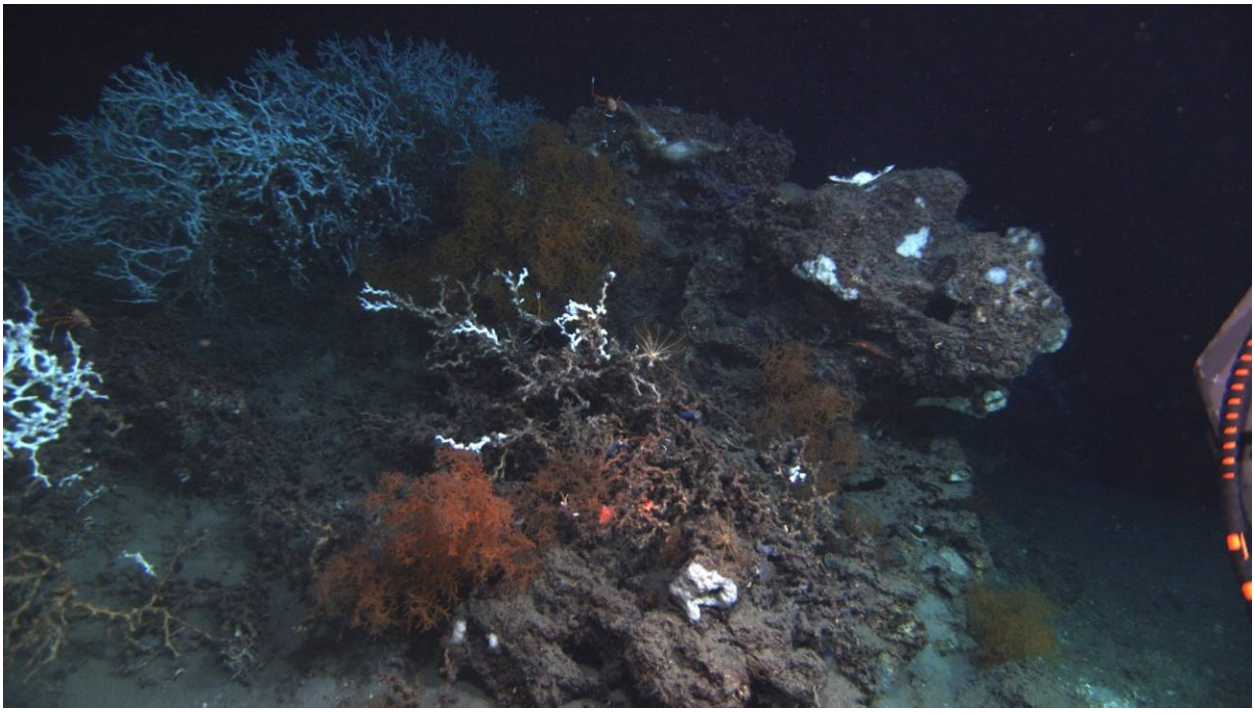

Figure 49. A large mound is colonized by red and orange *Leiopathes* sp., *Eumunida picta,* and live and dead *Lophelia pertusa* (VK826).

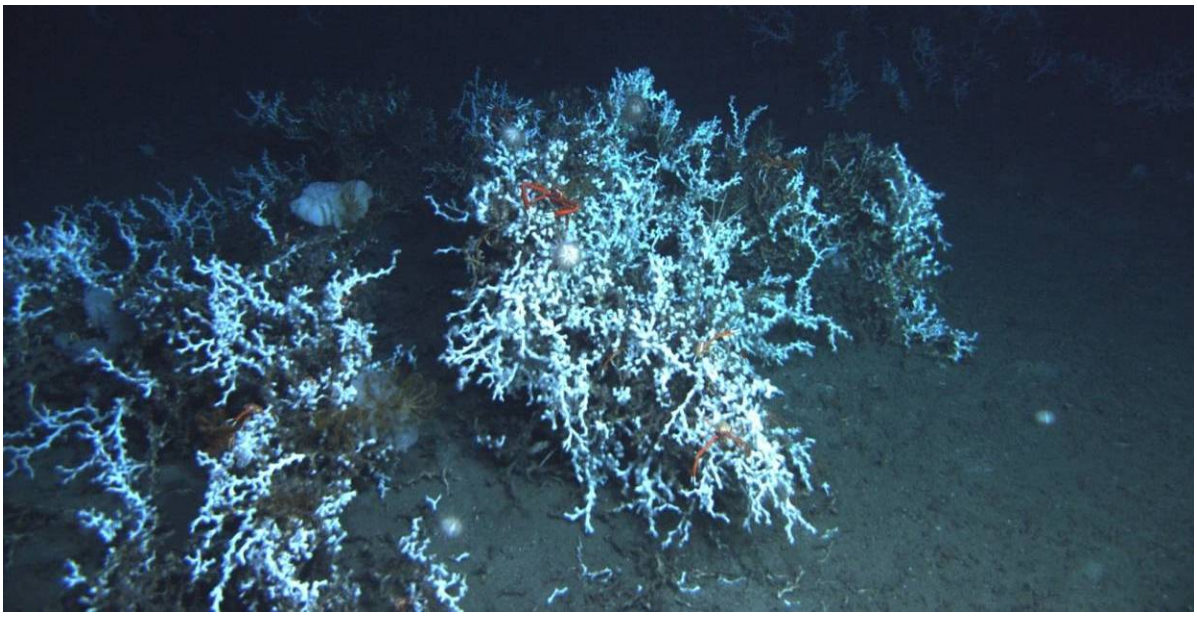

Figure 50. Thickets of *Lophelia pertusa* with *Eumunida picta, Echinus* urchins, and crinoid associates (VK826).

J2-541: MC338 - DIVE SUMMARY

1-Nov: MC338
0800: recover JASON II
0840: proceed to MC 338

2-Nov: MC338
1600: launchJASON II

J2-541: MC 338

This was an exploratory dive at an unexplored site that Bill Shedd, Harry Roberts, and Chuck Fisher had selected for survey as part of a NRDA effort. Delays in the approval and implementation of the NRDA survey cruise led by Bill Shedd made it impossible for us to dive upon a surveyed site as originally planned, so a dive track was planned based on the 3D seismic survey alone. There were numerous high reflectance areas along a ridge in the NE corner of block 338 and a dive track was planned starting at the S end of the ridge that moved up to the N about 1.5 km, with 2 detours to the E to visit local topographic highs with high reflectance. We ran this dive track for 6 hours without any sign of hard grounds (**Figure 51**). Only mud bottom was observed, with occasional signs of possible seepage in the form of discolored sediment and a small amount of black staining on the top of one of the local mounds. At the north end of our planned track we moved towards a new waypoint on a ridge to the NW, on the way to 3 targets supplied by C & C as "fluid expulsion zones" identified from previous side scan surveys within the area. On the way, we detoured slightly to a small sonar target and found a 3 meter long carbonate boulder with a pile of dead Madrepora on the down slope side and a small living colony on the side of the boulder. Upon closer investigation we noted that the living colony had portions that were producing a lot of mucous and areas covered in a brown slimy appearing substance. This was only the second time we had noted a colony with obvious visual signs of stress so we made some additional collections (notably a crab and a push core) to test for exposure of this site to hydrocarbons. We then continued upslope for about 400 m until we encountered another sonar target. Upon investigation this proved to be an area with more than 30 colonies of gorgonians on two large carbonate plates and assorted carbonate boulders. We quickly realized that these corals were stressed, that many of the colonies were recently dead or dying, sloughing tissue and covered with brown scum. At this point we stopped activities within the site, deployed a mosaic marker (AA) and then backed off from the central portion of the site. We then spent about an hour running a careful imaging survey of the area to determine the size of the site and approximate distribution of the corals. Throughout this time, we maintained a position with **JASON II** on the perimeter, and did not venture into the area containing corals. On the opposite edge of the site, we collected part of one colony with dead and live tissue and two ophiuroids attached to this coral, and deployed another marker (44). We then surveyed the rest of the site and made other collections (coral and ophiuroids) from a boulder about 15 m away from the main site. We also collected a part of another mostly dead gorgonian colony (hosting an anemone). During this exercise, it became evident that about ¾ of the colonies here

were in a state that none of us had seen before: covered with brown crud, dying and/or recently dead corals of at least three species. Following these detailed imaging surveys and small collections, we then proceeded to mosaic the entire main portion of the site on the raised two carbonate slabs (separated by less than a meter width of sediment). From about 6 meter height and then descended to an altitude of 3 meters to collect images for a higher resolution mosaic of the most diverse portion of the site (near the AA marker). We ended our work in this area by taking two push cores and collecting small pieces of 7 gorgonian colonies of at least 4 species for genetic identification. We also collected portions of 2 *Paramuricea* colonies (**Figure 52**) with associated ophiuroids and preserved them at depth in RNA later for gene expression studies.. In addition, we collected two anemones and additional ophiuroids and corals for hydrocarbon analyses.

We then proceeded to look to the north-northeast of this area for additional coral communities. Finding no sessile mega fauna or hard grounds during transects to this area, we proceeded upslope (~450 m) to the top of the high reflectance area and local topographic high. During transit, we observed mostly mud and small depressions that apparently contained pieces of dead Sargassum. At the top of the reflector, we did not find any hardbottom. Therefore, we continued towards the target 12 area. On our way, we continued to look for sonar targets, and using this method we found hard bottom. We briefly surveyed this area and concluded that the hardbottom was unoccupied by sessile megafauna. We then continued to the target 12 area to the northwest, also thought to be potential hard ground. We transited over mud and reached the area to find large boulders with empty/old mussel and clam shells, and small sparse tubeworms in the sediment. A few meters to the north amongst and at the base of these boulders were discrete tubeworm assemblages, appearing to be in good health ("clean" tubes with red plumes observed). We imaged and sampled 8-10 individuals and deployed a marker for future visits. We deemed mosaicking not appropriate at this site as the tubeworms would be largely obscured by overhanging boulders/rocks. We proceeded to two other potential targets (target 10 and 11) and found hard bottom, but no corals or chemosynthetic communities. We then proceeded 650 m almost due east back toward the Marker AA coral site, observing only mud along the way At this point the decision was made to head downslope and west to the U-166 while continuing our sonar and visual survey for hardbottom communities.

We arrived on the U-166 site at 0600 local time and proceeded to locate the microbiology coupon experiment on the main hull remains, as well as look for evidence of fouling from the Deepwater Horizon oil spill. We located the experiment aft of the conning tower on the deck and took numerous HD images. We then proceeded to amidships at the starboard rail just aft of the conning tower and recovered an anemone for hydrocarbon analyses. The only life forms observed in and around the hull were rusticles (white and red), anemones, bryozoans, and a single rattail fish (**Figure 53**). We collected HD images of rusticles around the conning tower and then photographed the forward gun in a downshot mosaic. The forward deck area around the 105 mm canon exhibited an increase in sediment cover from previous observation in 2003 and 2004. No visible evidence of oil spill impact was apparent at the site.

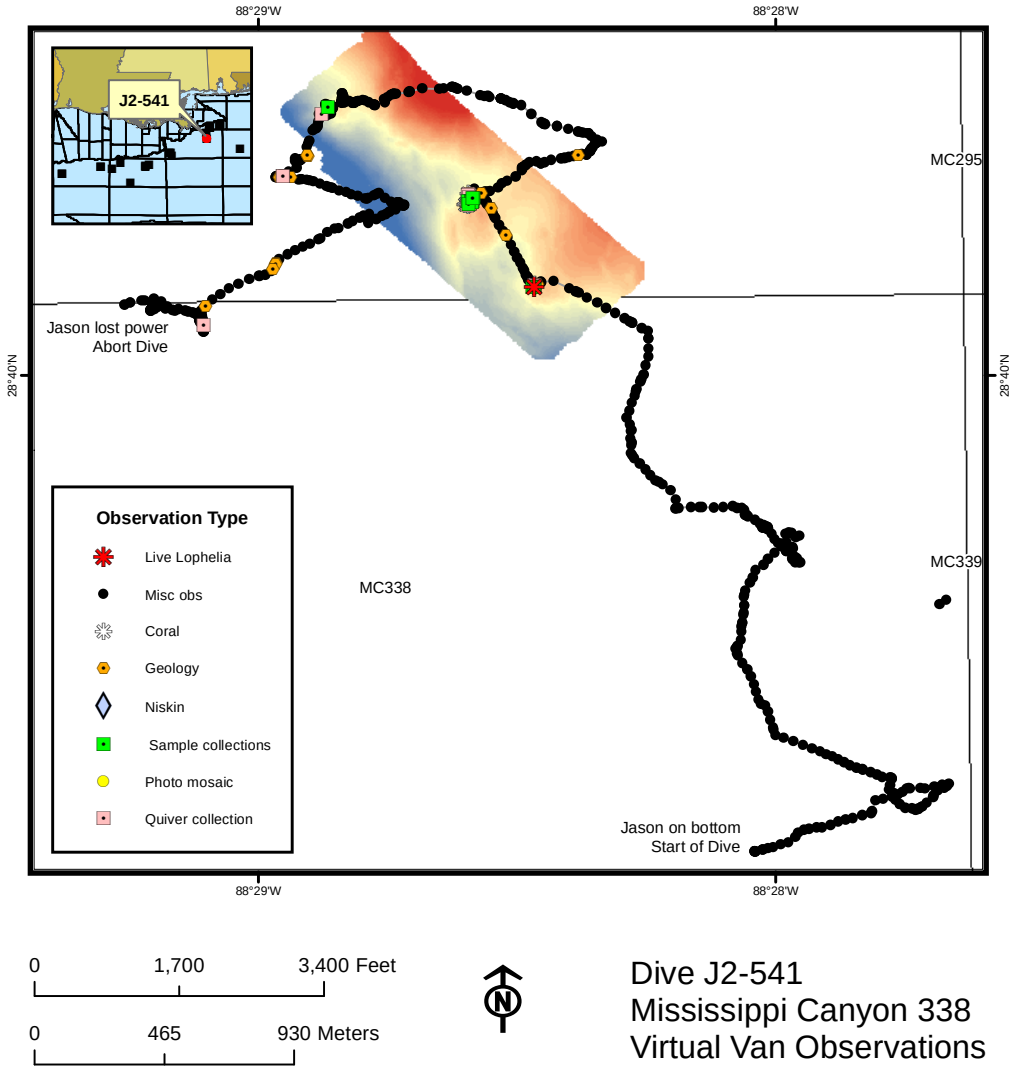

Figure 51. Events observed during lowering J2-541 at MC338 (inset)

After filming the main hull fragment we proceeded to the bow section 600 ft north of the main hull, where we located the second microbiology coupon experiment on the starboard side of the hull. After imaging the experiment we moved 7m north of the submarine's prow and sampled the seafloor sediment with push core #6.

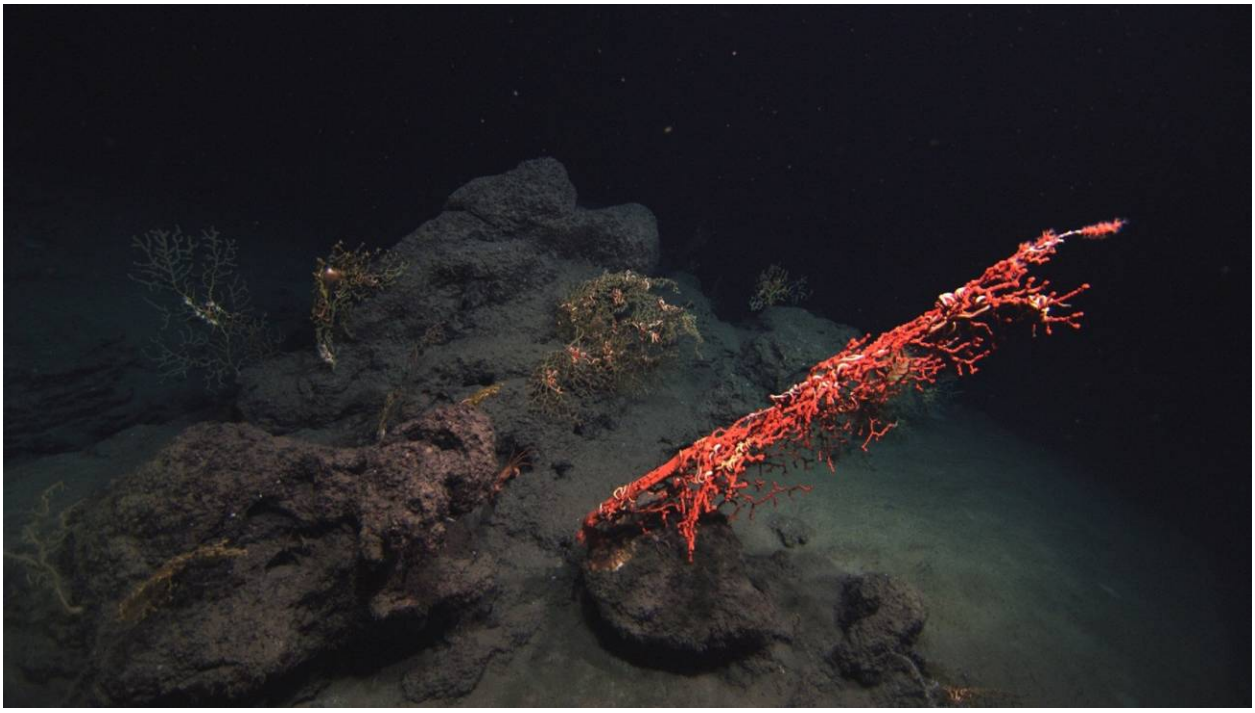

Figure 52. A large *Paragorgia regalis* colony settled on a boulder, surrounded by smaller colonies of *Paramuricea biscaya* (MC338).

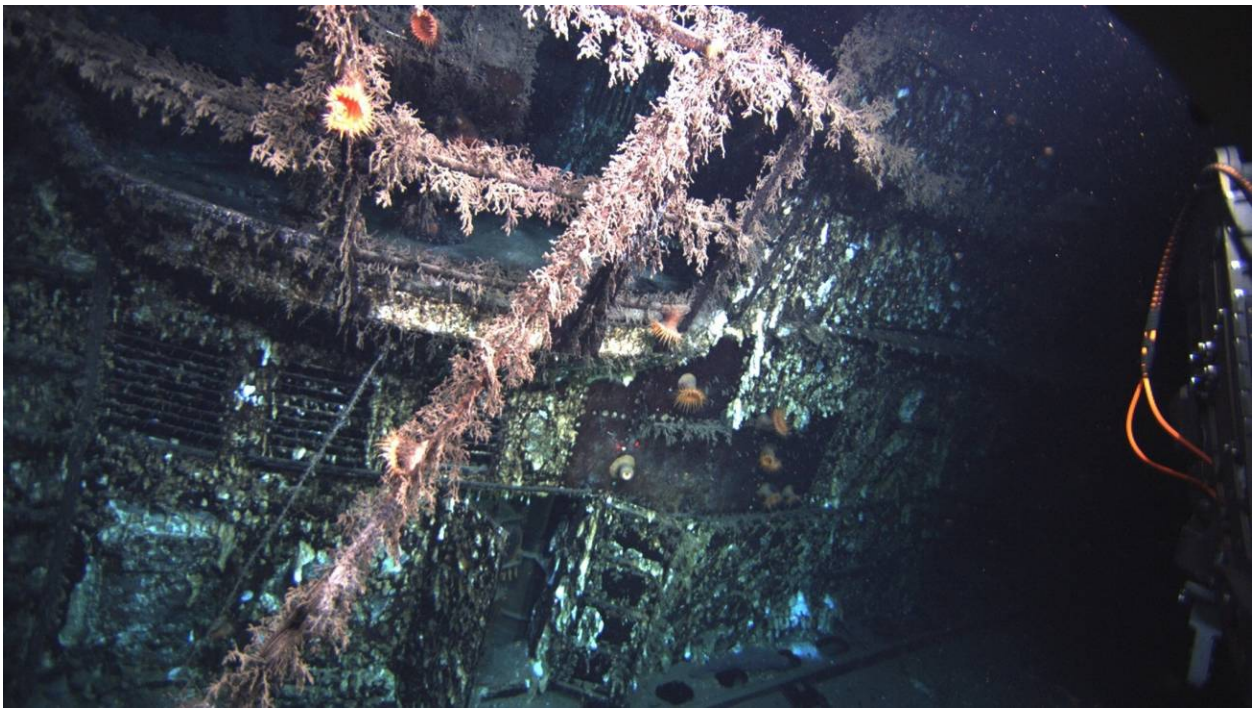

Figure 53. An unidentified octocoral species grows on the hull of a German U-boat, accompanied by a number of anemones (MC338).

We left the U-166 site and headed toward the passenger ship, Robert E. Lee. While in transit between the wreck sites **JASON II** experienced a loss of all power and the decision was made to abort the dive immediately and prepare for a "dead vehicle" recovery.

3-Nov: MC338

JASON II was recovered dead in the water at about 10:45 am local time.
The ship remained on station until 1:30 local time while the cause and impact of the problem with **JASON II** could be resolved. At about 1:30 local time we began a slow transit towards port. Although the **JASON II** problems were isolated and repaired by 1600, insufficient time remained for a productive dive and we continued towards port for an on time arrival the following am.

4-Nov:MC338 - 0900 arrival in Pensacola

APPENDIX 1 – MASTER SAMPLE COLLECTION INVENTORY

The following are unedited collection logs.
*Ron Brown/***JASON II** - *Lophelia* II Gulf of Mexico Cruise 4 – 2010

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1	water	J2-526	VK826	15-Oct-10	Niskin A								Temple	Cordes	23:32:56	29.156083	88.021375	526		
354	Tanacetipathes?	J2-526	VK826	15-Oct-10	Biobox Stbd		X	X	X			DR	PSU	Baums	23:17:12	29.156003	88.021390	530	X	
355	Tanacetipathes?	J2-526	VK826	15-Oct-10	Q8A		X	X	X			DR	PSU	Baums	23:24:20	29.156025	88.021378	531	X	
2005	Eumunida picta	J2-526	VK826	15-Oct-10	Biobox Stbd	Antipatharian						TS	USGS	Morrison	23:17:00	29.156003	88.021390	530	X	
3006	Hydroids	J2-526	VK826	15-Oct-10	Biobox Stbd	on Tanacetipathes: Ruiz Sample L2-10-354-J2-526	X						WHOI	Shank	23:16	29.156002	88.021390	527	X	
3007	Amphipod	J2-526	VK826	15-Oct-10	Biobox Stbd	on Tanacetipathes: Ruiz Sample L2-10-354-J2-526	X						WHOI	Shank	23:16	29.156002	88.021390	527	X	
3008	Eumunida picta	J2-526	VK826	15-Oct-10	Biobox Stbd	on Tanacetipathes: Ruiz Sample L2-10-354-J2-526	X						WHOI	Shank	23:16	29.156002	88.021390	527	X	subsample to C. Morrison
3009	Ostracod	J2-526	VK826	15-Oct-10	Biobox Stbd	on Tanacetipathes: Ruiz Sample L2-10-354-J2-526	X						WHOI	Shank	23:16	29.156002	88.021390	527	X	
4000	Sediment	Sediment Trap	VK826	15-Oct-10	Sediment trap Collection							AD	USGS	Demopoulos	XX:XX	XX.XXXX	XX.XXXX	XXX	X	hydroids
4001	Sediment	Sediment Trap	VK826	15-Oct-10	Sediment trap Collection							AD	USGS	Demopoulos	XX:XX	XX.XXXX	XX.XXXX	XXX	X	hydroids
4002	Sediment	Sediment Trap	VK826	15-Oct-10	Sediment trap Collection							AD	USGS	Demopoulos	XX:XX	XX.XXXX	XX.XXXX	XXX	X	anemone
4003	Sediment	Sediment Trap	VK826	15-Oct-10	Sediment trap Collection							AD	USGS	Demopoulos	XX:XX	XX.XXXX	XX.XXXX	XXX	X	anemone
3000	Hydroids	Sediment Trap M2	VK826	15-Oct-10	Sediment Trap M2	Sediment Trap M2	X						WHOI	Shank	17:12:00	29.159167	88.018833	463	X	epifauna off of sediment trap M2 collected at VK826
3001	Barnacle morph 3	Sediment Trap M2	VK826	15-Oct-10	Sediment Trap M2	Sediment Trap M2	X						WHOI	Shank	17:12:00	29.159167	88.018833	463	X	epifauna off of sediment trap M2 collected at VK826

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3002	Anemone morph 4	Sediment Trap M2	VK826	15-Oct-10	Sediment Trap M2	Sediment Trap M2	X						WHOI	Shank	17:12:00	29.159167	88.018833	463	X	epifauna off of sediment trap M2 collected at VK826
3003	Anemone morph 5	Sediment Trap M2	VK826	15-Oct-10	Sediment Trap M2	Sediment Trap M2	X						WHOI	Shank	17:12:00	29.159167	88.018833	463	X	epifauna off of sediment trap M2 collected at VK826
3004	Barnacle morph 1?	Sediment Trap M2	VK826	15-Oct-10	Sediment Trap M2	Sediment Trap M2	X						WHOI	Shank	17:12:00	29.159167	88.018833	463	X	epifauna off of sediment trap M2 collected at VK826
2	water	J2-526	VK826	16-Oct-10	Niskin C								Temple	Cordes	7:04:40	29.157927	88.016231	472		
3	water	J2-526	VK826	16-Oct-10	Niskin D								Temple	Cordes	4:42:57	29.158444	88.016242	468		
4	water	J2-526	VK826	16-Oct-10	Niskin E								Temple	Cordes	5:52:03	29.158259	88.016933	466		
5	water	J2-526	VK826	16-Oct-10	Niskin F								Temple	Cordes	4:43:03	29.158433	88.016249	468		
6	water	J2-526	VK826	16-Oct-10	Niskin G								Temple	Cordes	1:12:11	29.158595	88.019246	479		
356	Leiopathes	J2-526	VK826	16-Oct-10	Q8A		X	X	X			DR	PSU	Baums	3:15:59	29.157972	88.017565	471	X	orange
357	Leiopathes	J2-526	VK826	16-Oct-10	Red Chamber			X				DR (inRNA-frozen)	PSU	Baums	2:47:36	29.158169	88.018363	485	X	orange / 1st samples at 02:35:45
358	Leiopathes	J2-526	VK826	16-Oct-10	Red Chamber	Lophelia + glass sponge		X				DR (inRNA-frozen)	PSU	Baums	3:36:39	29.157952	88.017069	470	X	orange/ 2nd sample ar 03:30:21
2001	Lophelia pertusa	J2-526	VK826	16-Oct-10	Biobox Port			X	X	X		CM	USGS	Morrison	1:59:00	29.158372	88.019310	490		
2002	Lophelia pertusa	J2-526	VK826	16-Oct-10	Q8A	LII-10-2002		X				JL	Temple	Cordes	2:30:00	29.158276	88.018585	488		
2002	Lophelia pertusa	J2-526	VK826	16-Oct-10	Q8A	LII-10-2002		X				JL	Temple	Cordes	2:30:00	29.158276	88.018585	488		
2002	Lophelia pertusa	J2-526	VK826	16-Oct-10	Q8A	LII-10-2002		X				JL	Temple	Cordes	2:30:00	29.158276	88.018585	488		
2002	Lophelia pertusa	J2-526	VK826	16-Oct-10	Q8A			X	X	X		CM-JL	USGS	Morrison	2:30:00	29.158276	88.018585	488		
2003	Lophelia pertusa	J2-526	VK826	16-Oct-10	Red Chamber	LII-10-2003		X				JL	Temple	Cordes	2:52:00	29.158169	88.018363	485		
2003	Lophelia pertusa	J2-526	VK826	16-Oct-10	Red Chamber			X				CM-JL	USGS	Morrison	2:52:00	29.158169	88.018363	485		
2004	Lophelia pertusa	J2-526	VK826	16-Oct-10	Red Chamber	LII-10-2004		X				JL	Temple	Cordes	3:36:00	29.157952	88.017069	469		
2004	Lophelia pertusa	J2-526	VK826	16-Oct-10	Red Chamber			X	X			CM-JL	USGS	Morrison	3:36:00	29.157952	88.017069	469		
2006	Eunicid	J2-526	VK826	16-Oct-10	Red Chamber	Lophelia #2004		X	X			CM	USGS	Morrison	3:36:00	29.157952	88.017069	469	X	

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2007	Cidaris	J2-526	VK826	16-Oct-10	Q10-Accidental				X			AD	USGS	Morrison	9:19:00	29.157525	88.019036	501	X	
3005	Tubeworm	J2-526	VK826	16-Oct-10	Blender A			X					WHOI	Shank	00:10	29.157792	88.020003	513	X	split into 4x50 mL tubes for Halanych; soak for 12 hours in 4C in RNAlater; mislabelled bags as 10:30
3010	Polynoid	J2-526	VK826	16-Oct-10	Biobox Port	on Lophelia : Morrison sample L210-2001	X		X				WHOI	Shank	02:13	29.158370	88.019301	489	X	1/2 frozen and 1/2 in 95% ethanol
3011	Gastropod	J2-526	VK826	16-Oct-10	Biobox Port	on Lophelia : Morrison sample L210-2001	X						WHOI	Shank	02:13	29.158370	88.019301	489	X	Caryophila morph 2?
3012	Glass sponge	J2-526	VK826	16-Oct-10	Red Chamber	on Lophelia : Morrison sample L210-2003		X					WHOI	Shank	02:52	29.158169	88.018363	483		
3013	Stalked sponges	J2-526	VK826	16-Oct-10	Red Chamber	on Lophelia : Morrison sample L210-2003		X					WHOI	Shank	02:52	29.158169	88.018363	483		
3014	Polynoid	J2-526	VK826	16-Oct-10	Red Chamber	on Lophelia : Morrison sample L210-2003		X					WHOI	Shank	02:52	29.158169	88.018363	483		
3015	Barnacle morph 3	J2-526	VK826	16-Oct-10	Basket	on Cidaris sp.: L210-526-0856-3016	X						WHOI	Shank	08:56	29.157515	88.019030	500	X	Glyptelasma sp.?
3016	pencil urchin Cidaris sp.	J2-526	VK826	16-Oct-10	Basket		X					NRDA	WHOI-NRDA	Shank	08:56	29.157515	88.019030	500	X	subsample to C. Morrison; we got a bit of tissue and NRDA took most of individual: GU2988-A1016-TE9-01
5001	Methane1	J2-526	VK826	16-Oct-10	Niskin G							BD	FSU	McDonald	1:12:11	29.158595	88.019246	479		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
5002	Methane2	J2-527	MC885	16-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
7	water	RB-10-07_001	MC885	16-Oct-10	Niskin 12								Temple	Cordes	23:53:24	30.411183	87.210500	4		
8	water	RB-10-07_001	MC885	16-Oct-10	Niskin 11								Temple	Cordes	23:53:24	30.411183	87.210500	4		
9	water	RB-10-07_001	MC885	16-Oct-10	Niskin 10								Temple	Cordes	23:53:24	30.411183	87.210500	55		
10	water	RB-10-07_001	MC885	16-Oct-10	Niskin 9								Temple	Cordes	23:53:24	30.411183	87.210500	55		
11	water	RB-10-07_001	MC885	16-Oct-10	Niskin 8								Temple	Cordes	23:53:24	30.411183	87.210500	150		
12	water	RB-10-07_001	MC885	16-Oct-10	Niskin 7								Temple	Cordes	23:53:24	30.411183	87.210500	150		
13	water	RB-10-07_001	MC885	16-Oct-10	Niskin 6								Temple	Cordes	23:53:24	30.411183	87.210500	300		
14	water	RB-10-07_001	MC885	16-Oct-10	Niskin 5								Temple	Cordes	23:53:24	30.411183	87.210500	301		
15	water	RB-10-07_001	MC885	16-Oct-10	Niskin 4								Temple	Cordes	23:53:24	30.411183	87.210500	450		
16	water	RB-10-07_001	MC885	16-Oct-10	Niskin 3								Temple	Cordes	23:53:24	30.411183	87.210500	450		
17	water	RB-10-07_001	MC885	16-Oct-10	Niskin 2								Temple	Cordes	23:53:24	30.411183	87.210500	630		
18	water	RB-10-07_001	MC885	16-Oct-10	Niskin 1								Temple	Cordes	23:53:24	30.411183	87.210500	630		
19	water	J2-527	MC885	17-Oct-10	Niskin H								Temple	Cordes	7:56:59	28.066436	89.712332	619		
359	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q15		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:47:42	28.075016	89.712564	627	X	
360	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q13		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	12:08	28.076680	89.710467	631	X	
361	Callogorgia sp.	J2-527	MC885	17-Oct-10	Biobox Port		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	07:15	28.066527	89.713692	625		
362	Callogorgia sp.	J2-527	MC885	17-Oct-10	Biobox Port	on rock	X	X	X			AQ	Temple	Cordes	07:15	28.066527	89.713692	625	X	
363	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q12A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	07:08	28.066527	89.713692	625		
364	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q11A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	09:38	28.080000	89.713333	627	X	
365	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q11B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	09:42	28.070012	89.713388	637	X	

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
366	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q9A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	06:10	28.066485	89.714745	626		
367	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q9B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	06:16	28.066485	89.714745	626		
368	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q8B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	07:50	28.066523	89.712378	623		
369	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q8A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	07:47	28.066523	89.712378	623		
370	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q1B		X	X	X			AQ	Temple	Cordes	1:58:02	28.065469	89.717444	634		
371	Apristurus sp. (catshark)	J2-527	MC885	17-Oct-10	Q15		X	X				AQ(informal in)	Temple	Cordes	9:47:42	28.075016	89.712564	627	X	
372	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q11A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	09:38	28.080000	89.713333	627		
373	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q6B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	06:06	28.066485	89.714745	626		
374	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q6A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	06:03	28.066485	89.714745	626		
375	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q7A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	11:32	28.076800	89.710467	631		
376	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q4B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	05:32	29.066313	89.715885	630		
377	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q4A		X	X	X				Temple	Cordes	05:21	29.066313	89.715885	630		
378	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q5A		X	X	X				Temple	Cordes	5:00:22	28.066335	89.716540	632		
379	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q5B		X	X	X			AQ	Temple	Cordes	05:18	29.066313	89.715885	630		
380	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q3B		X	X	X			AQ	Temple	Cordes	04:50	28.066410	89.716553	632		
381	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q10A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:54:28	28.066445	89.712342	623		
382	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q3A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	02:12	28.065500	89.717333	634		
383	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q2B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	02:03	28.065333	89.717333	634		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
384	Callogorgia sp.	J2-527	MC885	17-Oct-10	Q2A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	01:53	28.065500	89.717333	634		
385	Callogorgia sp.	J2-527	MC885	17-Oct-10	Red Chamber		X	X	X		X	AQ(inRNAlater)	Temple-PSU	Cordes-Fisher	04:15	28.066393	89.717012	632		
2008	Eunicid	J2-527	MC885	17-Oct-10	Biobox Port	on carbonate		X	X			CM	USGS	Morrison	02:24	28.065500	89.717333	634	X	
2009	Javania?	J2-527	MC885	17-Oct-10	Green Slurp			X	X			CM	USGS	Morrison	4:53:55	28.066366	89.716585	632	X	
2010	Eunicid	J2-527	MC885	17-Oct-10	Biobox Port			X	X			CM	USGS	Morrison	02:24	28.065500	89.717333	634		
2011	Lophelia pertusa	J2-527	MC885	17-Oct-10	Q12B			X	X	X		CM	USGS	Morrison	08:54	28.069238	89.713112	624	X	
2012	Lophelia pertusa	J2-527	MC885	17-Oct-10	Red Chamber	LII-10-2012		X				JL	Temple	Cordes	04:15	28.066393	89.717012	632		
2012	Lophelia pertusa	J2-527	MC885	17-Oct-10	Red Chamber	LII-10-2012		X				JL	Temple	Cordes	04:15	28.066393	89.717012	632		
2012	Lophelia pertusa	J2-527	MC885	17-Oct-10	Red Chamber	LII-10-2012		X				JL	Temple	Cordes	04:15	28.066393	89.717012	632		
2012	Lophelia pertusa	J2-527	MC885	17-Oct-10	Red Chamber			X				CM-JL	USGS	Morrison	04:15	28.066393	89.717012	632		Jay Lunden subsampled
2013	Lophelia pertusa	J2-527	MC885	17-Oct-10	Q2A				X			CM	USGS	Morrison	01:53	28.065500	89.717333	634		small pieces
3017	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q15A	Callogorgia; LII-10-359	X	X			X		WHOI-PSU	Shank-Fisher	09:50	28.153345	89.813383	637	X	with catfish eggs; Erin subsampled for Fisher to study isotopes; took about 1 inch of disc and arm and incubate in 4C in fresh RNALater for about 24 hours before freezing out of RNALater
3018	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q15A	Callogorgia; LII-10-359	X				X		WHOI-PSU	Shank-Fisher	09:50	28.153345	89.813383	637	X	Erin subsampled for Fisher to study isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3019	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q13	Callogorgia; LII-10-360	X	X			X		WHOI-PSU	Shank-Fisher	12:08	28.076680	89.710467	631	X	Erin subsampled for Fisher to study isotopes; took about 1 inch of disc and arm and incubate in 4C in fresh RNALater for about 24 hours before freezing out of RNALater
3020	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Biobox Port	Callogorgia; LII-10-361	X	X			X		WHOI-PSU	Shank-Fisher	07:15	28.066527	89.713692	625		Erin subsampled for Fisher to study isotopes; took about 1 inch of disc and arm and incubate in 4C in fresh RNALater for about 24 hours before freezing out of RNALater; Time of Collection is wrong; actual is 02:20
3021	Shrimp	J2-527	MC885	17-Oct-10	Biobox Port	Callogorgia; LII-10-362	X						WHOI	Shank	02:24	28.065500	89.717333	634		Erin subsampled for Fisher to study isotopes; Time of Collection is wrong; actual is 02:20

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3022	Gastropod morph 2	J2-527	MC885	17-Oct-10	Biobox Port		X						WHOI	Shank	02:24	28.065500	89.717333	634		Erin subsampled for Fisher to study isotopes; Time of Collection is wrong; actual is 02:20
3023	Zoanthids	J2-527	MC885	17-Oct-10	Biobox Port	off Rocks with Lophelia	X						WHOI	Shank	02:24	28.065500	89.717333	634		Erin subsampled for Fisher to study isotopes; Time of Collection is wrong; actual is 02:20
3024	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q12A	Callogorgia; LII-10-363	X	X			X		WHOI-PSU	Shank-Fisher	07:08	28.066527	89.713692	625		Erin subsampled for Fisher to study isotopes; took about 1 inch of disc and arm and incubate in 4C in fresh RNALater for about 24 hours before freezing out of RNALater
3025	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q11B	Callogorgia; LII-10-364? or LII-10-365?	X				X		WHOI-PSU	Shank-Fisher	09:42	28.070012	89.713388	637		Erin subsampled for Fisher to study isotopes
3026	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q11B	Callogorgia;LII-10-364? or LII-10-365?	X				X		WHOI-PSU	Shank-Fisher	09:42	28.070012	89.713388	637		Erin subsampled for Fisher to study isotopes
3027	Decorator Crab morph 1	J2-527	MC885	17-Oct-10	Q11A		X						WHOI	Shank	09:38	28.080000	89.713333	637		Erin subsampled for Fisher to study isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3028	Amphipod morph 1	J2-527	MC885	17-Oct-10	Green Slurp		X						WHOI	Shank	04:53	28.065077	89.716553	632	X	Slurp of cup corals; Erin subsampled for Fisher to study isotopes
3029	Amphipod morph 2	J2-527	MC885	17-Oct-10	Green Slurp		X						WHOI	Shank	04:53	28.065077	89.716553	632	X	Slurp of cup corals; Erin subsampled for Fisher to study isotopes
3030	Amphipod morph 3	J2-527	MC885	17-Oct-10	Green Slurp		X						WHOI	Shank	04:53	28.065077	89.716553	632	X	Slurp of cup corals; Erin subsampled for Fisher to study isotopes
3031	Unidentified polychaete	J2-527	MC885	17-Oct-10	Green Slurp		X						WHOI	Shank	04:53	28.065077	89.716553	632		Slurp of cup corals; Capitellid worm; Erin subsampled for Fisher to study isotopes
3032	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q9A	Callogorgia; LII-10-366	X				X		WHOI-PSU	Shank-Fisher	06:10	28.066485	89.714745	626		Erin subsampled for Fisher to study isotopes
3033	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q9B	Callogorgia; LII-10-367	X				X		WHOI-PSU	Shank-Fisher	06:16	28.066485	89.714745	626		Erin subsampled for Fisher to study isotopes
3034	Sabellid worm	J2-527	MC885	17-Oct-10	Q12B	off Lophelia	X				X		WHOI-PSU	Shank-Fisher	08:54	28.069238	89.713112	624	X	Euratella sp.; Erin subsampled for Fisher to study isotopes
3035	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q8A	Callogorgia; LII-10-369	X				X		WHOI-PSU	Shank-Fisher	07:47	28.066523	89.712378	623		Erin subsampled for Fisher to study isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3036	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q8B	Callogorgia; LII-10-368	X				X		WHOI-PSU	Shank-Fisher	07:50	28.066523	89.712378	623		Erin subsampled for Fisher to study isotopes
3037	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q1B	Callogorgia; LII-10-370	X				X		WHOI-PSU	Shank-Fisher	04:37	28.066415	89.716628	632		Erin subsampled for Fisher to study isotopes
3038	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q1A	Callogorgia; LII-10-372	X				X		WHOI-PSU	Shank-Fisher	01:49	28.065500	89.717450	634		Erin subsampled for Fisher to study isotopes
3039	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q6B	Callogorgia; LII-10-373	X						WHOI	Shank	06:06	28.066485	89.714745	626		Erin subsampled for Fisher to study isotopes
3040	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q6A	Callogorgia; LII-10-374	X				X		WHOI-PSU	Shank-Fisher	06:03	28.066485	89.714745	626		Erin subsampled for Fisher to study isotopes
3041	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q7A	Callogorgia; LII-10-375	X				X		WHOI-PSU	Shank-Fisher	11:32	28.076800	89.710467	631		Erin subsampled for Fisher to study isotopes
3042	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q7A	hanging onto TS3041	X				X		WHOI-PSU	Shank-Fisher	11:32	28.076800	89.710467	631		small ophiuroid hanging onto TS3041; Erin subsampled for Fisher to study isotopes
3043	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q4B	Callogorgia; LII-10-376	X				X		WHOI-PSU	Shank-Fisher	05:32	29.066313	89.715885	630		Erin subsampled for Fisher to study isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3044	Tubeworm	J2-527	MC885	17-Oct-10	Blender A								WHOI	Shank	06:58	28.066527	89.713692	625		2 tube parts (broke larger top part in half); 4x50mL Tubes of RNALater in 4C at 11:47AM; Erin subsampled for Fisher to study isotopes
3045	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q4A	Callogorgia; LII-10-377	X						WHOI	Shank	05:21	29.066313	89.715885	630		just 2 arms; no body?; Erin subsampled for Fisher to study isotopes
3046	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q5A	Callogorgia; LII-10-378	X						WHOI	Shank	05:01	28.066410	89.716553	632		Erin subsampled for Fisher to study isotopes
3047	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q5B	Callogorgia; LII-10-379	X						WHOI	Shank	05:18	29.066313	89.715885	630		Erin subsampled for Fisher to study isotopes
3048	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q3B	Callogorgia; LII-10-380	X						WHOI	Shank	04:50	28.066410	89.716553	632		Erin subsampled for Fisher to study isotopes
3049	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q10	Callogorgia; LII-10-381	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	07:54	28.066523	89.712378	623	X	took arm and rest to NRDA: GU2889-A1017-TE901; Erin subsampled for Fisher to study isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3050	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q3A	Callogorgia; LII-10-382	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	02:12	28.065500	89.717333	634	X	took arm and rest to NRDA: GU2889-A1016-TE901; Erin subsampled for Fisher to study isotopes
3051	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q2B	Callogorgia; LII-10-383	X				X		WHOI-PSU	Shank-Fisher	02:03	28.065333	89.717333	634		Erin subsampled for Fisher to study isotopes
3052	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Q2A	Callogorgia; LII-10-384	X				X		WHOI-PSU	Shank-Fisher	01:53	28.065500	89.717333	634		Erin subsampled for Fisher to study isotopes
3053	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Red Chamber	Callogorgia; LII-10-385		X			X		WHOI-PSU	Shank-Fisher	04:15	28.066393	89.717012	632		came up dead and rubbery; cut into pieces and incubate at 4C in fresh RNALater; Erin subsampled for Fisher to study isotopes
3054	Asteroschema sp. 1	J2-527	MC885	17-Oct-10	Blender B	Callogorgia; LII-10-376		X					WHOI	Shank	05:42	29.066313	89.715885	630	X	not as rubbery as TS3053; Erin subsampled for Fisher to study isotopes
3055	Asteroschema sp.?	J2-527	MC885	17-Oct-10	push core box	?	X						WHOI	Shank	NA	NA	NA	NA		found in push core crate; unknown time and location of collection
4004	Sediment (0-2 cm)	J2-527	MC885	17-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	3:56:58	28.066422	89.717029	633	X	NRDA # GU2889-A1016-SE301
4005	Sediment (2-5 cm)	J2-527	MC885	17-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	3:56:58	28.066422	89.717029	633	X	NRDA # GU2889-A1016-SE301

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4006	Sediment (5-10 cm)	J2-527	MC885	17-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	3:56:58	28.066422	89.717029	633	X	NRDA # GU2889-A1016-SE301
4007	Sediment (0-2 cm)	J2-527	MC885	17-Oct-10	PC2							AD	USGS	Demopoulos	3:58:00	28.066422	89.717028	633	X	original coordinate were NOT recorded in Virtual Van; the one here is mean of PC 1 and PC 3
4008	Sediment (2-5 cm)	J2-527	MC885	17-Oct-10	PC2							AD	USGS	Demopoulos	3:58:00	28.066422	89.717028	633	X	
4009	Sediment (5-10 cm)	J2-527	MC885	17-Oct-10	PC2							AD	USGS	Demopoulos	3:58:00	28.066422	89.717028	633	X	
4010	Sediment (0-2 cm)	J2-527	MC885	17-Oct-10	PC1							AD	USGS	Demopoulos	4:00:54	28.066423	89.717027	633	X	
4011	Sediment (2-5 cm)	J2-527	MC885	17-Oct-10	PC1							AD	USGS	Demopoulos	4:00:54	28.066423	89.717027	633	X	
4012	Sediment (5-10 cm)	J2-527	MC885	17-Oct-10	PC1							AD	USGS	Demopoulos	4:00:54	28.066423	89.717027	633	X	
4013	Sediment (0-2 cm)	J2-527	MC885	17-Oct-10	PC9							AD	USGS	Demopoulos	4:03:18	28.066421	89.717024	633	X	
4014	Sediment (2-5 cm)	J2-527	MC885	17-Oct-10	PC9							AD	USGS	Demopoulos	4:03:18	28.066421	89.717024	633	X	
4015	Sediment (5-10 cm)	J2-527	MC885	17-Oct-10	PC9							AD	USGS	Demopoulos	4:03:18	28.066421	89.717024	633	X	
5003	Methane3	J2-527	MC885	17-Oct-10	ROV							BD	FSU	McDonald	NA	NA	NA	NA		
6001	rock	J2-527	MC885	17-Oct-10	rock box							DF	LSU	Roberts	2:22:07	28.065506	-89.717378	634		
6002	rock	J2-527	MC885	17-Oct-10	rock box							DF	LSU	Roberts	2:24:53	28.065523	-89.717332	634		
6003	rock	J2-527	MC885	17-Oct-10	rock box							DF	LSU	Roberts	2:24:35	28.065539	-89.717319	634		
6004	rock	J2-527	MC885	17-Oct-10	rock box							DF	LSU	Roberts	2:24:35	28.065539	-89.717319	634		
3068	B. childressi - adductor	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		2 mussels butterflied and soaked in RNALater O/N; will dissect adductor; gill; and mantle and freeze t -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3103	B. childressi - mantle	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		
3104	B. childressi - gill	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		
3105	B. childressi - adductor	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		
3106	B. childressi - mantle	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		
3107	B. childressi - gill	J2-528	GC246	17-Oct-10	Blue Chamber			X					WHOI	Shank	22:25:23	27.717564	90.651485	854		
5004	Methane4	J2-528	GC246	17-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
20	water	RB-10-07_002	GC246	17-Oct-10	Niskin 12								Temple	Cordes	19:39:16	27.722500	90.649833	3		
21	water	RB-10-07_002	GC246	17-Oct-10	Niskin 11								Temple	Cordes	19:39:16	27.722500	90.649833	3		
22	water	RB-10-07_002	GC246	17-Oct-10	Niskin 10								Temple	Cordes	19:39:16	27.722500	90.649833	100		
23	water	RB-10-07_002	GC246	17-Oct-10	Niskin 9								Temple	Cordes	19:39:16	27.722500	90.649833	100		
24	water	RB-10-07_002	GC246	17-Oct-10	Niskin 8								Temple	Cordes	19:39:16	27.722500	90.649833	200		
25	water	RB-10-07_002	GC246	17-Oct-10	Niskin 7								Temple	Cordes	19:39:16	27.722500	90.649833	200		
26	water	RB-10-07_002	GC246	17-Oct-10	Niskin 6								Temple	Cordes	19:39:16	27.722500	90.649833	400		
27	water	RB-10-07_002	GC246	17-Oct-10	Niskin 5								Temple	Cordes	19:39:16	27.722500	90.649833	400		
28	water	RB-10-07_002	GC246	17-Oct-10	Niskin 4								Temple	Cordes	19:39:16	27.722500	90.649833	600		
29	water	RB-10-07_002	GC246	17-Oct-10	Niskin 3								Temple	Cordes	19:39:16	27.722500	90.649833	600		
30	water	RB-10-07_002	GC246	17-Oct-10	Niskin 2								Temple	Cordes	19:39:16	27.722500	90.649833	876		
31	water	RB-10-07_002	GC246	17-Oct-10	Niskin 1								Temple	Cordes	19:39:16	27.722500	-90.649833	876		
3056	Barnacle morph 3	Sediment Trap MC1 at MC751	MC751	17-Oct-10	Sediment Trap MC1	Seidment Trap MC1	X						WHOI	Shank	XX:XX	28.194000	89.798333	442		on sediment trap; collected several hours after recovery
32	water	J2-528	GC246	18-Oct-10	Niskin H								Temple	Cordes	7:36:14	27.701744	-90.648379	832		
386	Muriceides sp. ?	J2-528	GC246	18-Oct-10	Basket	on rock	X	X	X			AQ	Temple	Cordes	11:30:01	27.689646	90.645221	845		
387	Callogorgia sp.	J2-528	GC246	18-Oct-10	Q4A		X	X	X			AQ	Temple	Cordes	11:56:53	27.689541	90.645574	846	X	micro photo

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388	Callogorgia sp.	J2-528	GC246	18-Oct-10	Q12A		X	X	X			AQ	Temple	Cordes	11:05:36	27.689731	90.644930	847		
389	Callogorgia sp.	J2-528	GC246	18-Oct-10	Q12B		X	X	X			AQ	Temple	Cordes	11:12:31	27.689721	90.644962	848	X	
390	Paramuricea sp. B	J2-528	GC246	18-Oct-10	Q7A		X	X	X			AQ	Temple	Cordes	11:38:00	27.689661	90.645214	845	X	purple_pink in situ
391	Callogorgia sp.	J2-528	GC246	18-Oct-10	Q10B		X	X	X			AQ	Temple	Cordes	11:42:37	27.689657	90.645214	845	X	
392	Callogorgia sp.	J2-528	GC246	18-Oct-10	Q10A		X	X	X			AQ	Temple	Cordes	11:42:37	27.689657	90.645214	845		
393	Ophidiiform	J2-528	GC246	18-Oct-10	Blue Slurp		X	X	X			AQ	Temple	Cordes	4:02:58	27.703797	90.653179	823		
394	Callogorgia sp.	J2-528	GC246	18-Oct-10	Red Chamber		X	X	X			AQ(inRNAlater)	Temple	Cordes	12:15:34	27.689340	90.645827	844		
395	Dumbo Octopus	J2-528	GC246	18-Oct-10	Black Slurp		X	X				AQ	Temple	Cordes	4:43:13	27.703072	90.651605	843		
1000	B. childressi 1	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1001	B. childressi 2	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1002	B. childressi 3	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1003	B. childressi 4	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1004	B. childressi 5	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1005	B. childressi 6	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1006	B. childressi 7	J2-528	GC246	18-Oct-10	MPB		X		X		X		PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1007	B. childressi 8	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1008	B. childressi 9	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1009	B. childressi 10	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1010	B. childressi 11	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		

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1011	B. childressi 12	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1012	B. childressi 13	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1013	B. childressi 14	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1014	B. childressi 15	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1015	B. childressi 16	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1016	B. childressi 17	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1017	B. childressi 18	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1018	B. childressi 19	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1019	B. childressi 20	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1020	B. childressi 21	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1021	B. childressi 22	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1022	B. childressi 23	J2-528	GC246	18-Oct-10	MPB		X		X				PSU-Temple	Fisher-Cordes	6:58:12	27.701647	90.648557	834		
1023	Branchinotogluma sp.	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
1024	Branchinotogluma sp.	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
1025	Branchinotogluma sp.	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
1026	phascolosoma turnerae	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		

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1027	Methanoaricia dendrobranchiata	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
1028	Glycera tesselata	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
1029	Methanoaricia dendrobranchiata	J2-528	GC246	18-Oct-10	MPB						X	CF	PSU	Fisher	6:58:12	27.701647	90.648557	834		
2014	Lithodid	J2-528	GC246	18-Oct-10	Biobox Port				X			CM	USGS	Morrison	3:52:34	27.703902	90.653520	820		
2015	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp							CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2016	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp							CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2017	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp				X			CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2018	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp				X			CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2019	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp			X	X	X		CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2020	Munidopsis	J2-528	GC246	18-Oct-10	Blue Slurp			X	X	X		CM	USGS	Morrison	4:19:36	27.703763	90.653231	824		
2021	Echinus? Urchin	J2-528	GC246	18-Oct-10	Q2				X			CM	USGS	Morrison	5:27:17	27.702212	90.648703	836		
2022	Munidopsis	J2-528	GC246	18-Oct-10	Black Slurp				X			CM	USGS	Morrison	4:43:13	27.703072	90.651605	843		
3057	large Brachyuran crab	J2-528	GC246	18-Oct-10	Biobox		X					NRDA	WHOI-NRDA	Shank	3:52:00	27.703902	90.653520	820	X	subsample to Shank and rest to NRDA; GU2790-A-1017-T-E9-03; 2 of 2
3058	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q4A	Callogorgia LII-10-387	X						WHOI	Shank	11:56:53	27.689541	90.645574	846		subsample to Erin for Fisher
3059	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q12A	Callogorgia LII-10-388	X						WHOI	Shank	11:05:36	27.689731	90.644930	847		no body; just one arm; subsample to Erin for Fisher
3060	large lithodid crab	J2-528	GC246	18-Oct-10	Biobox		X					NRDA	WHOI-NRDA	Shank	3:52:00	27.703902	90.653520	820	X	subsample to Morrison; Shank; and rest NRDA
3061	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q12B	Callogorgia LII-10-389	X	X					WHOI	Shank	11:12:31	27.689721	90.644962	848	X	subsample to Erin for Fisher

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3062	Holothurian	J2-528	GC246	18-Oct-10	Red Slurp		X					NRDA	WHOI-NRDA	Shank	1:35:54	27.713473	90.658024	800	X	subsample to Shank; Erin; rest to NRDA
3063	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q7A	Paramuricea B LII-10-390	X	X					WHOI	Shank	11:38:00	27.689661	90.645214	845	X	subsample to Erin for Fisher
3064	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q10B	Callogorgia LII-10-391	X	X					WHOI	Shank	11:42:37	27.689657	90.645214	845	X	subsample to Erin for Fisher
3065	Barnacle morph 3	J2-528	GC246	18-Oct-10	Biobox	Brachyuran Crab TS3057	X		X			TS	WHOI	Shank	3:52:00	27.703902	90.653520	820	X	Voucher in 95% Ethanol
3066	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Q10A	Callogorgia LII-10-392	X						WHOI	Shank	11:42:37	27.689657	90.645214	845		subsample to Erin for Fisher
3067	Ophiuroid morph 10	J2-528	GC246	18-Oct-10	Blue Slurp		X		X				WHOI	Shank	4:20:35	27.703763	90.653231	824	X	Voucher in 95% Ethanol; Ophiomusium sp.?
3069	Amphipod morph 3	J2-528	GC246	18-Oct-10	Blue Slurp		X						WHOI	Shank	4:20:35	27.703763	90.653231	824		mislabelled time as 23:30
3070	Decorator crab morph 2	J2-528	GC246	18-Oct-10	Blue Slurp				X			TS	WHOI	Shank	4:20:35	27.703763	90.653231	824		Voucher in 95% Ethanol
3071	sea urchin	J2-528	GC246	18-Oct-10	Q2		X					NRDA	WHOI-NRDA	Shank	5:27:17	27.702212	90.648703	836	X	subsample to Shank and Morrison and rest to NRDA: GU2790-A-1018-T-E9-01; 3 of 3
3072	Shrimp morph 1	J2-528	GC246	18-Oct-10	Blue Slurp		X						WHOI	Shank	4:20:35	27.703763	90.653231	824		
3073	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3074	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3075	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3076	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3077	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3078	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3079	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3080	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C
3081	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A			X					WHOI	Shank	6:03:55	27.701961	90.648729	834	X	butterflied in lab; soaked in RNALater O/N and then frozen at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3082	Cataegis meroglypta	J2-528	GC246	18-Oct-10	Q11A	mussel clump TS3076-3078	X		X			TS	WHOI	Shank	6:03:55	27.701961	90.648729	834	X	Voucher in 95% Ethanol
3083	Cantrainea macleani	J2-528	GC246	18-Oct-10	Q11A	mussel clump TS3076-3078	X						WHOI	Shank	6:03:55	27.701961	90.648729	834	X	
3084	B. childressi	J2-528	GC246	18-Oct-10	Q11A	mussel clump 3073-3081	X						WHOI	Shank	6:03:55	27.701961	90.648729	834	X	small
3085	anemone	J2-528	GC246	18-Oct-10	Q11A	mussel clump 3073-3081	X						WHOI	Shank	6:03:55	27.701961	90.648729	834		
3086	Cataegis meroglypta	J2-528	GC246	18-Oct-10	Black Slurp and Q11A	off of B. childressi	X						WHOI	Shank	6:00:44	27.701961	90.648729	834		accidentally mixed the 2 samples
3087	B. childressi	J2-528	GC246	18-Oct-10	Black Slurp and Q11A	off of B. childressi	X						WHOI	Shank	6:00:44	27.701961	90.648729	834		
3088	Asteroschema sp. 1	J2-528	GC246	18-Oct-10	Red Chamber	Callogorgia LII-10-394	X	X					WHOI	Shank	12:18:31	27.689340	90.645828	844		incubate at 4C O/N; subsample to Erin for Fisher
3089	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3090	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3091	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3092	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3093	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3094	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3095	B. childressi - adductor	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3096	B. childressi - mantle	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3097	B. childressi - gill	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		dissected and frozen
3098	B. childressi	J2-528	GC246	18-Oct-10	Q11A		X						WHOI	Shank	6:03:55	27.701961	90.648729	834		3 small ones ~2mm and 4 larger individuals; 6 smaller mussels are in smaller whirlpack within a larger whirlpack containing all 7
3099	B. childressi	J2-528	GC246	18-Oct-10	Q2	with sea urchin TS3071	X						WHOI	Shank	5:27:17	27.702212	90.648703	836		
3100	Cantrainea macleani	J2-528	GC246	18-Oct-10	Q2	off B. childressi TS3099 and sea urchin TS3071			X			TS	WHOI	Shank	5:45:54	27.702202	90.648700	833		Voucher in 95% Ethanol
3101	Echiuran?	J2-528	GC246	18-Oct-10	Q11A				X			TS	WHOI	Shank	6:03:55	27.701961	90.648729	834		Voucher in 95% Ethanol
3102	Cantrainea macleani	J2-528	GC246	18-Oct-10	Black Slurp				X			TS	WHOI	Shank	5:45:54	27.702202	90.648700	833		Voucher in 95% Ethanol
4016	Sediment (0-5 cm)	J2-528	GC246	18-Oct-10	PC7							NRDA	USGS-NRDA	Demopoulos	6:41:25	27.701674	90.648556	834	X	datasheet says PC 8
4017	Sediment (0-2 cm)	J2-528	GC246	18-Oct-10	PC9							AD	USGS	Demopoulos	6:23:08	27.701713	90.648620	834	X	
4018	Sediment (2-5 cm)	J2-528	GC246	18-Oct-10	PC9							AD	USGS	Demopoulos	6:23:08	27.701713	90.648620	834	X	
4019	Sediment (5-10 cm)	J2-528	GC246	18-Oct-10	PC9							AD	USGS	Demopoulos	6:23:08	27.701713	90.648620	834	X	
4020	Sediment (0-2 cm)	J2-528	GC246	18-Oct-10	PC10							AD	USGS	Demopoulos	6:30:00	27.701619	90.648576	834	X	
4021	Sediment (2-5 cm)	J2-528	GC246	18-Oct-10	PC10							AD	USGS	Demopoulos	6:30:00	27.701619	90.648576	834	X	
4022	Sediment (5-10 cm)	J2-528	GC246	18-Oct-10	PC10							AD	USGS	Demopoulos	6:30:00	27.701619	90.648576	834	X	
4023	Mussel Pot Subsample	J2-528	GC246	18-Oct-10	MPB							AD	USGS	Demopoulos	6:58:12	27.701647	90.648557	834		
5005	Methane5	J2-528	GC246	18-Oct-10	Niskin H							BD	FSU	McDonald	7:36:14	27.701744	-90.648379	832		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
6005	rock	J2-528	GC246	18-Oct-10	rock box							DF	LSU	Roberts	11:30:01	27.689584	-90.645436	845		
404	Tanacetipathes?	J2-529	GC354	18-Oct-10	Q5B		X	X	X			AQ	Temple	Cordes	22:50:10	27.596945	91.823479	573		
405	Stichopathes sp.	J2-529	GC354	18-Oct-10	Q5B		X	X	X			AQ	Temple	Cordes	22:53:03	27.596946	91.823476	573		
412	Paracalyptrophora sp.	J2-529	GC354	18-Oct-10	Q9A		X	X	X			AQ	Temple	Cordes	23:02:21	27.596988	91.823421	574	X	microphoto
3108	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -80C
3109	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -80C
3110	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -80C
3111	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -80C
3112	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3113	Lamellibranchid Tubeworm	J2-529	GC354	18-Oct-10	Red Chamber			X					WHOI	Shank	23:35:25	27.597872	91.823406	567		Broke up tubeworms and soak O/N at 4C in RNALater; then freeze at -8C
5006	Methane6	J2-529	GC354	18-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
33	water	RB-10-07_003	GC354	18-Oct-10	Niskin 12								Temple	Cordes	19:22:50	27.597333	-91.822667	3		
34	water	RB-10-07_003	GC354	18-Oct-10	Niskin 11								Temple	Cordes	19:22:50	27.597333	-91.822667	3		
35	water	RB-10-07_003	GC354	18-Oct-10	Niskin 10								Temple	Cordes	19:22:50	27.597333	-91.822667	101		
36	water	RB-10-07_003	GC354	18-Oct-10	Niskin 9								Temple	Cordes	19:22:50	27.597333	-91.822667	101		
37	water	RB-10-07_003	GC354	18-Oct-10	Niskin 8								Temple	Cordes	19:22:50	27.597333	-91.822667	201		
38	water	RB-10-07_003	GC354	18-Oct-10	Niskin 7								Temple	Cordes	19:22:50	27.597333	-91.822667	201		
39	water	RB-10-07_003	GC354	18-Oct-10	Niskin 6								Temple	Cordes	19:22:50	27.597333	-91.822667	300		
40	water	RB-10-07_003	GC354	18-Oct-10	Niskin 5								Temple	Cordes	19:22:50	27.597333	-91.822667	300		
41	water	RB-10-07_003	GC354	18-Oct-10	Niskin 4								Temple	Cordes	19:22:50	27.597333	-91.822667	400		
42	water	RB-10-07_003	GC354	18-Oct-10	Niskin 3								Temple	Cordes	19:22:50	27.597333	-91.822667	400		
43	water	RB-10-07_003	GC354	18-Oct-10	Niskin 2								Temple	Cordes	19:22:50	27.597333	-91.822667	556		
44	water	RB-10-07_003	GC354	18-Oct-10	Niskin 1								Temple	Cordes	19:22:50	27.597333	-91.822667	556		
45	water	J2-529	GC354	19-Oct-10	Niskin H								Temple	Cordes	4:18:01	27.598187	-91.826237	525		
396	Paramuricea sp. B	J2-529	GC354	19-Oct-10	Biobox		X	X	X			AQ	Temple	Cordes	2:51:37	27.597843	91.825317	539		
397	Paramuriceidae/Plexauridae sp. A	J2-529	GC354	19-Oct-10	Biobox		X	X	X			AQ	Temple	Cordes	1:23:46	27.598022	91.824668	546		
398	Zoanthids	J2-529	GC354	19-Oct-10	Biobox		X	X	X			AQ	Temple	Cordes	2:51:37	27.597863	91.825311	537		
399	Paramuricea sp. A?	J2-529	GC354	19-Oct-10	Q1A		X	X	X			AQ	Temple	Cordes	3:23:37	27.598222	91.826715	529		
400	Paramuriceidae/Plexauridae sp. A	J2-529	GC354	19-Oct-10	Q1A			X				AQ	Temple	Cordes	3:45:36	27.598237	91.826716	529		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
401	Paramuricea sp. A?	J2-529	GC354	19-Oct-10	Q8B		X	X	X			AQ	Temple	Cordes	4:10:31	27.598241	91.826315	527		
402	cf. Nicella sp.	J2-529	GC354	19-Oct-10	Q8A		X	X	X			AQ	Temple	Cordes	1:49:24	27.597915	91.825048	539		
403	cf. Nicella sp.	J2-529	GC354	19-Oct-10	Q5A		X	X	X			AQ	Temple	Cordes	22:26:52	27.596855	91.823186	581		
406	Tanacetipathes?	J2-529	GC354	19-Oct-10	Q2B		X	X	X			AQ	Temple	Cordes	2:37:11	27.597857	91.825326	538	X	
407	Stichopathes sp.	J2-529	GC354	19-Oct-10	Q8A		X	X	X			AQ	Temple	Cordes	2:04:19	27.597869	91.825136	539		
408	Muriceides sp. ?	J2-529	GC354	19-Oct-10	Q2B		X	X	X			AQ	Temple	Cordes	2:37:11	27.597857	91.825326	538	X	micro photo
409	Acanthogorgia cf. armata	J2-529	GC354	19-Oct-10	Q2A		X	X	X			AQ	Temple	Cordes	2:23:30	27.597857	91.825321	537	X	micro photo
410	Muriceides sp. ?	J2-529	GC354	19-Oct-10	Q2A		X	X	X			AQ	Temple	Cordes	2:16:41	27.597853	91.825319	538		
411	Acanthogorgia cf. armata	J2-529	GC354	19-Oct-10	Q12A		X	X	X			AQ	Temple	Cordes	22:15:35	27.596664	91.823023	588		
1030	Eunice sp.	J2-529	GC354	19-Oct-10	MPB						X	CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1031	unid. polychaete 2	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1032	unid. polychaete 1	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1033	unid. polychaete 3	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1034	Oplaphoridae 1 (shrimp)	J2-529	GC354	19-Oct-10	MPB		X					CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1035	Oplaphoridae 2 (shrimp)	J2-529	GC354	19-Oct-10	MPB		X					CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1037	isopod (baby Bathynomus giganteus)	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1038	isopod (small)	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1039	anemone (pink)	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1040	unid. polychaete 4	J2-529	GC354	19-Oct-10	MPB							CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
1041	Lophelia pertusa	J2-529	GC354	19-Oct-10	MPB						X		PSU	Fisher	10:42:18	27.597896	91.826356	526		tissue from several polyps pooled
1042	Bellottia robusta	J2-529	GC354	19-Oct-10	MPB						X	CF	PSU	Fisher	10:42:18	27.597896	91.826356	526		
2023	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q1B	LII-10-2023		X				JL	Temple	Cordes	4:03:56	27.598241	91.826315	527		
2023	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q1B	LII-10-2023		X				JL	Temple	Cordes	4:03:56	27.598241	91.826315	527		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2023	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q1B	LII-10-2023		X				JL	Temple	Cordes	4:03:56	27.598241	91.826315	527		
2023	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q1B				X			CM	USGS	Morrison	4:03:56	27.598241	91.826315	527		
2024	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q3A				X			CM	USGS	Morrison	4:31:25	27.598378	91.826092	529		
2025	Eunicid	J2-529	GC354	19-Oct-10	Q3A			X	X	X		CM-MN	USGS	Morrison	4:31:25	27.598378	91.826092	529		
2026	Eumunida picta juvenile	J2-529	GC354	19-Oct-10	Q3A				X			CM-MN	USGS	Morrison	4:31:25	27.598378	91.826092	529		
2027	Eumunida picta juvenile	J2-529	GC354	19-Oct-10	Q5A			X	X	X		CM-MN	USGS	Morrison	22:26:52	27.596855	91.823186	581		
2028	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q7A				X			CM	USGS	Morrison	12:14:10	27.597703	91.826888	528		
2029	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q4	LII-10-2029		X				JL	Temple	Cordes	11:32:43	27.597894	91.826359	526		
2029	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q4			X	X	X		CM	USGS	Morrison	11:32:43	27.597894	91.826359	526		
2030	Eunicid	J2-529	GC354	19-Oct-10	Q4				X	X		CM-MN	USGS	Morrison	11:32:43	27.597894	91.826359	526		
2031	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q6A	LII-10-2031		X				JL	Temple	Cordes	12:00:27	27.597738	91.826907	528		
2031	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q6A				X			CM	USGS	Morrison	12:00:27	27.597738	91.826907	528		
2032	Eunicid ?	J2-529	GC354	19-Oct-10	Q6A				X			CM-MN	USGS	Morrison	12:00:27	27.597738	91.826907	528		
2033	Lophelia pertusa	J2-529	GC354	19-Oct-10	Q6B				X			CM	USGS	Morrison	12:06:03	27.597735	91.826900	528		
2034	Lophelia pertusa	J2-529	GC354	19-Oct-10	MPB				X			CF	PSU-USGS	Morrison-Fisher	10:42:18	27.597896	91.826356	526		
2035	Munidopsis	J2-529	GC354	19-Oct-10	MPB				X			CM-MN	PSU-USGS	Morrison-Fisher	10:42:18	27.597896	91.826356	526		
2036	Munidopsis	J2-529	GC354	19-Oct-10	MPB							CM-MN	PSU-USGS	Morrison-Fisher	10:42:18	27.597896	91.826356	526		
2037	Munidopsis	J2-529	GC354	19-Oct-10	MPB				X			CM-MN	PSU-USGS	Morrison-Fisher	10:42:18	27.597896	91.826356	526		
2038	Munidopsis	J2-529	GC354	19-Oct-10	MPB							CM-MN	PSU-USGS	Morrison-Fisher	10:42:18	27.597896	91.826356	526		
3114	Asteroid morph 1	J2-529	GC354	19-Oct-10	Biobox		X		X			TS	WHOI	Shank	3:37:46	27.598225	91.826802	528	X	part was frozen the rest in 95% EtOH
3115	Aplacophoran	J2-529	GC354	19-Oct-10	Biobox	Plexaurid A LII-10-397	X		X			TS	WHOI	Shank	2:51:37	27.597863	91.825311	537	X	

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3116	Hydroids	J2-529	GC354	19-Oct-10	Biobox	Paramuricea B LII-10-396	X						WHOI	Shank	1:28:51	27.598018	91.824664	545	X	on coral skeleton part of coral
3117	Zoanthids	J2-529	GC354	19-Oct-10	Biobox	Paramuricea B LII-10-396	X						WHOI	Shank	1:28:51	27.598018	91.824664	545	X	about 6
3118	Polychaete parts	J2-529	GC354	19-Oct-10	Biobox	from Rock of Paramuricea B LII-10-396	X						WHOI	Shank	1:28:51	27.598018	91.824664	545		
3119	Sponge	J2-529	GC354	19-Oct-10	Biobox	from Rock of Paramuricea B LII-10-396	X						WHOI	Shank	1:28:51	27.598018	91.824664	545		
3120	Sabellid worm polychaete	J2-529	GC354	19-Oct-10	Biobox	from Rock of Paramuricea B LII-10-396	X						WHOI	Shank	1:28:51	27.598018	91.824664	545	X	
3121	Crinoid	J2-529	GC354	19-Oct-10	Biobox	Plexaurid A LII-10-397	X		X			TS	WHOI	Shank	2:51:37	27.597863	91.825311	537	X	part was frozen and whole individual was stored in 95% EtOH
3122	Aplacophoran	J2-529	GC354	19-Oct-10	Q1A	Plexaurid A LII-10-400	X						WHOI	Shank	3:45:36	27.598237	91.826716	529		
3123	Ophiuroid morph 5	J2-529	GC354	19-Oct-10	Q8A	Stichopathes LII-10-407	X		X			TS	WHOI	Shank	2:04:19	27.597869	91.825136	539	X	part was frozen and whole individual was stored in 95% EtOH
3124	snail morph 1	J2-529	GC354	19-Oct-10	Q1B	Lophelia LII-10-2023	X						WHOI	Shank	4:03:56	27.598241	91.826315	527		
3125	Hydroids	J2-529	GC354	19-Oct-10	Q1B	Lophelia LII-10-2023	X						WHOI	Shank	4:03:56	27.598241	91.826315	527		
3126	Hydroids	J2-529	GC354	19-Oct-10	Q3A	Lophelia LII-10-2024	X						WHOI	Shank	4:31:25	27.598378	91.826092	529		
3127	Anemone morph 4	J2-529	GC354	19-Oct-10	Q4	Lophelia LII-10-2029	X		X			TS	WHOI	Shank	11:32:43	27.597894	91.826359	526	X	

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3128	Hydroids	J2-529	GC354	19-Oct-10	Q4	Lophelia LII-10-2029	X						WHOI	Shank	11:32:43	27.597894	91.826359	526		
3129	Turrid gastropod	J2-529	GC354	19-Oct-10	Orange Slurp flush		X		X			TS	WHOI	Shank	NA	NA	NA	NA	X	
3130	Bivalve	J2-529	GC354	19-Oct-10	Orange Slurp flush		X						WHOI	Shank	NA	NA	NA	NA	X	
3131	Polynoid	J2-529	GC354	19-Oct-10	Orange Slurp flush				X			TS	WHOI	Shank	NA	NA	NA	NA	X	
3132	gastropod eggs	J2-529	GC354	19-Oct-10	Orange Slurp flush	Turrid gastropod TS3129	X						WHOI	Shank	NA	NA	NA	NA	X	
3133	Hydroids	J2-529	GC354	19-Oct-10	Q6A	Lophelia LII-10-2031	X						WHOI	Shank	12:00:27	27.597738	91.826907	528		
4024	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	11:23:44	27.597861	-91.826540	527		
4025	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	11:23:44	27.597861	-91.826540	527		
4026	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	11:23:44	27.597861	-91.826540	527		
4027	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC9							AD	USGS	Demopoulos	0:25:59	27.598077	-91.823056	568		
4028	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC9							AD	USGS	Demopoulos	0:25:59	27.598077	-91.823056	568		
4029	Sediment (5-9 cm)	J2-529	GC354	19-Oct-10	PC9							AD	USGS	Demopoulos	0:25:59	27.598077	-91.823056	568		
4030	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC5							AD	USGS	Demopoulos	11:44:36	27.597690	-91.826809	528		
4031	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC5							AD	USGS	Demopoulos	11:44:36	27.597690	-91.826809	528		
4032	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC5							AD	USGS	Demopoulos	11:44:36	27.597690	-91.826809	528		
4033	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC10							AD	USGS	Demopoulos	0:30:12	27.598078	-91.823048	568		
4034	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC10							AD	USGS	Demopoulos	0:30:12	27.598078	-91.823048	568		
4035	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC10							AD	USGS	Demopoulos	0:30:12	27.598078	-91.823048	568		
4036	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC8							AD	USGS	Demopoulos	0:36:05	27.598088	-91.823060	567		
4037	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC8							AD	USGS	Demopoulos	0:36:05	27.598088	-91.823060	567		
4038	Sediment (5-8 cm)	J2-529	GC354	19-Oct-10	PC8							AD	USGS	Demopoulos	0:36:05	27.598088	-91.823060	567		
4039	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC1							AD	USGS	Demopoulos	11:19:54	27.597869	-91.826520	527		

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4040	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC1							AD	USGS	Demopoulos	11:19:54	27.597869	-91.826520	527		
4041	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC1							AD	USGS	Demopoulos	11:19:54	27.597869	-91.826520	527		
4042	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC2							AD	USGS	Demopoulos	11:21:30	27.597866	-91.826529	527		
4043	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC2							AD	USGS	Demopoulos	11:21:30	27.597866	-91.826529	527		
4044	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC2							AD	USGS	Demopoulos	11:21:30	27.597866	-91.826529	527		
4045	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC6							AD	USGS	Demopoulos	11:46:30	27.597697	-91.826804	528		
4046	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC6							AD	USGS	Demopoulos	11:46:30	27.597697	-91.826804	528		
4047	Sediment (5-8 cm)	J2-529	GC354	19-Oct-10	PC6							AD	USGS	Demopoulos	11:46:30	27.597697	-91.826804	528		
4048	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC4							AD	USGS	Demopoulos	11:25:07	27.597858	-91.826544	527		
4049	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC4							AD	USGS	Demopoulos	11:25:07	27.597858	-91.826544	527		
4050	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC4							AD	USGS	Demopoulos	11:25:07	27.597858	-91.826544	527		
4051	Sediment (0-2 cm)	J2-529	GC354	19-Oct-10	PC7							AD	USGS	Demopoulos	11:50:50	27.597708	-91.826799	528		
4052	Sediment (2-5 cm)	J2-529	GC354	19-Oct-10	PC7							AD	USGS	Demopoulos	11:50:50	27.597708	-91.826799	528		
4053	Sediment (5-10 cm)	J2-529	GC354	19-Oct-10	PC7							AD	USGS	Demopoulos	11:50:50	27.597708	-91.826799	528		
4099	Mussel Pot Subsample	J2-529	GC354	19-Oct-10	MPB							AD	USGS	Demopoulos	10:42:18	27.597896	91.826356	526		
4100	Mussel Pot Subsample	J2-529	GC354	19-Oct-10	MPB							AD	USGS	Demopoulos	10:42:18	27.597896	91.826356	526		
4101	Mussel Pot Subsample	J2-529	GC354	19-Oct-10	MPB							AD	USGS	Demopoulos	10:42:18	27.597896	91.826356	526		
4102	Mussel Pot Subsample	J2-529	GC354	19-Oct-10	MPB							AD	USGS	Demopoulos	10:42:18	27.597896	91.826356	526		
5007	Methane7	J2-529	GC354	19-Oct-10	Niskin H							BD	FSU	McDonald	4:18:01	27.598187	-91.826237	525		
5023	Coral-Live/Dead	J2-529	GC354	19-Oct-10								BD	FSU	McDonald	NA	NA	NA	NA		
5032	water-DIC	J2-529	GC354	19-Oct-10								BD	FSU	McDonald	NA	NA	NA	NA		
6006	rock	J2-529	GC354	19-Oct-10	rock box							DF	LSU	Roberts	3:10:51	27.598193	-91.826794	525		
6007	rock	J2-529	GC354	19-Oct-10	rock box							DF	LSU	Roberts	3:48:01	27.598261	-91.826660	526		

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6008	rock	J2-529	GC354	19-Oct-10	rock box							DF	LSU	Roberts	3:52:04	27.598255	-91.826369	525		
6009	rock	J2-529	GC354	19-Oct-10	rock box							DF	LSU	Roberts	4:23:36	27.598299	-91.826035	525		
6010	rock	J2-529	GC354	19-Oct-10	rock box							DF	LSU	Roberts	4:35:05	27.598292	-91.826058	528		
425	Callogorgia sp.	J2-530	GB299	19-Oct-10	Q2A		X	X	X		X	DR	Temple-PSU	Cordes-Fisher	23:44:29	27.686375	92.230181	358		
426	Leiopathes	J2-530	GB299	19-Oct-10	Q2A		X	X	X		X	DR	PSU	Baums-Fisher	23:39:42	27.686375	92.230181	358		white
427	Leiopathes	J2-530	GB299	19-Oct-10	Q2B		X	X	X		X	DR	PSU	Baums-Fisher	23:52:16	27.686380	92.230231	358		white
429	Octocoral-white solitary	J2-530	GB299	19-Oct-10	Q2B			X				AQ	Temple	Cordes	23:52:16	27.686380	92.230231	358	X	
434	Leiopathes	J2-530	GB299	19-Oct-10	Q5B		X	X	X			DR	PSU	Baums	23:20:29	27.686373	92.230020	359		white
435	Callogorgia sp.	J2-530	GB299	19-Oct-10	Q5A		X	X	X			AQ	Temple	Cordes	23:15:55	27.686390	92.230011	359		
436	Leiopathes	J2-530	GB299	19-Oct-10	Q5A		X	X	X			DR	PSU	Baums	23:15:55	27.686390	92.230011	359		
443	Callogorgia sp.	J2-530	GB299	19-Oct-10	Q8B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	22:54:56	27.686116	92.229003	360		with ophiuroid
444	Leiopathes	J2-530	GB299	19-Oct-10	Q8B		X	X	X		X	DR	PSU	Baums-Fisher	22:49:49	27.686116	92.229002	360	X	red; check picture virtual van; white in the water? Looks white; but not a good frame
445	Callogorgia sp.	J2-530	GB299	19-Oct-10	Q8A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	22:36:38	27.685979	92.228891	359		with ophiuroid
446	Leiopathes	J2-530	GB299	19-Oct-10	Q8A		X	X	X		X	DR	PSU	Baums-Fisher	22:33:17	27.685980	92.228891	359		orange; check picture virtual van; white in the water?
3143	Asteroschema sp. 1	J2-530	GB299	19-Oct-10	Q2A	Callogorgia LII-10-425	X	X			X		WHOI-PSU	Shank-Fisher	23:44:29	27.686375	92.230181	358		subsample to Erin for Fisher

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3148	Asteroschema sp. 1	J2-530	GB299	19-Oct-10	Q5A	Callogorgia LII-10-414	X						WHOI	Shank	23:15:55	27.686390	92.230011	359		subsample to Erin for Fisher; maybe same sample as TS3134? - REPEAT SAMPLE?
3151	Asteroschema sp. 1	J2-530	GB299	19-Oct-10	Q8A	Callogorgia LII-10-445	X						WHOI	Shank	22:33:17	27.685980	92.228891	359		subsample to Erin for Fisher; only arms
3152	Asteroschema sp. 1	J2-530	GB299	19-Oct-10	Q8B	Callogorgia LII-10-443	X						WHOI	Shank	22:49:49	27.686116	92.229002	360		subsample to Erin for Fisher; only arms
5008	Methane8	J2-530	GB299	19-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
46	water	RB-10-07_004	GB299	19-Oct-10	Niskin 12								Temple	Cordes	19:15:13	27.686167	-92.217667	4		
47	water	RB-10-07_004	GB299	19-Oct-10	Niskin 11								Temple	Cordes	19:15:13	27.686167	-92.217667	4		
48	water	RB-10-07_004	GB299	19-Oct-10	Niskin 10								Temple	Cordes	19:15:13	27.686167	-92.217667	50		
49	water	RB-10-07_004	GB299	19-Oct-10	Niskin 9								Temple	Cordes	19:15:13	27.686167	-92.217667	50		
50	water	RB-10-07_004	GB299	19-Oct-10	Niskin 8								Temple	Cordes	19:15:13	27.686167	-92.217667	100		
51	water	RB-10-07_004	GB299	19-Oct-10	Niskin 7								Temple	Cordes	19:15:13	27.686167	-92.217667	100		
52	water	RB-10-07_004	GB299	19-Oct-10	Niskin 6								Temple	Cordes	19:15:13	27.686167	-92.217667	150		
53	water	RB-10-07_004	GB299	19-Oct-10	Niskin 5								Temple	Cordes	19:15:13	27.686167	-92.217667	150		
54	water	RB-10-07_004	GB299	19-Oct-10	Niskin 4								Temple	Cordes	19:15:13	27.686167	-92.217667	251		
55	water	RB-10-07_004	GB299	19-Oct-10	Niskin 3								Temple	Cordes	19:15:13	27.686167	-92.217667	251		
56	water	RB-10-07_004	GB299	19-Oct-10	Niskin 2								Temple	Cordes	19:15:13	27.686167	-92.217667	340		
57	water	RB-10-07_004	GB299	19-Oct-10	Niskin 1								Temple	Cordes	19:15:13	27.686167	-92.217667	340		
58	water	J2-530	GB299	20-Oct-10	Niskin H								Temple	Cordes	12:14:04	27.685937	-92.228673	358		
413	Leiopathes	J2-530	GB299	20-Oct-10	Q15A		X	X	X			DR	PSU	Baums	9:23:54	27.685013	92.220487	343	X	white

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
414	Callogorgia sp.	J2-530	GB299	20-Oct-10	Q16A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	11:58:46	27.685886	92.228534	361	X	micro photo
415	Leiopathes	J2-530	GB299	20-Oct-10	Biobox Stbd		X	X	X		X	DR	PSU	Baums-Fisher	4:19:45	27.686501	92.229548	362		white
416	Leiopathes	J2-530	GB299	20-Oct-10	Q13A		X	X	X		X	DR	PSU	Baums-Fisher	9:08:13	27.684975	92.220402	342		white
417	Antipatharian	J2-530	GB299	20-Oct-10	Biobox Stbd		X	X	X			AQ	Temple	Cordes	3:51:56	27.686547	92.229984	361	X	wispy
418	Paramuricea A?	J2-530	GB299	20-Oct-10	Biobox Stbd		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	4:48:15	27.686621	92.228677	361	X	
419	Leiopathes	J2-530	GB299	20-Oct-10	Biobox Port		X	X	X		X	DR	PSU	Baums-Fisher	NA	NA	NA	NA	X	pink; may be same as Q11B
420	Leiopathes	J2-530	GB299	20-Oct-10	Biobox Port		X	X	X		X	DR	PSU	Baums-Fisher	9:34:46	27.684980	92.220486	342		pink; LIVE ANIMAL
421	Paramuricea C?	J2-530	GB299	20-Oct-10	Biobox Port		X	X	X		X		Temple-PSU	Cordes-Fisher	9:28:12	27.684978	92.220482	342	X	
422	Leiopathes	J2-530	GB299	20-Oct-10	Q3B		X	X	X			DR	PSU	Baums	3:12:53	27.686510	92.230070	361		white
423	Leiopathes	J2-530	GB299	20-Oct-10	Q3A		X	X	X		X		PSU	Baums-Fisher	3:06:23	27.686510	92.230070	361		white
424	Bathypathes sp.	J2-530	GB299	20-Oct-10	Q3A		X	X	X			DR	PSU	Baums	3:11:26	27.686510	92.230070	361	X	
428	Callogorgia sp.	J2-530	GB299	20-Oct-10	Q2B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:00:13	27.686381	92.230232	358	X	
430	Leiopathes	J2-530	GB299	20-Oct-10	Biobox Stbd		X	X	X			DR	PSU	Baums	4:19:45	27.686501	92.229548	362		white; LIVE ANIMAL
431	Paramuricea A?	J2-530	GB299	20-Oct-10	Q17		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	12:10:39	27.685886	92.228534	361	X	
432	Leiopathes	J2-530	GB299	20-Oct-10	Q1B		X	X	X		X	DR	PSU	Baums-Fisher	4:04:55	27.686412	92.229971	358		white
433	Leiopathes	J2-530	GB299	20-Oct-10	Q1A		X	X	X			DR	PSU	Baums	0:11:01	27.686316	92.230397	358	X	white
437	Antipatharian	J2-530	GB299	20-Oct-10	Q16B		X	X	X			DR	PSU	Baums	12:04:21	27.685886	92.228534	361		
438	Leiopathes	J2-530	GB299	20-Oct-10	Q4A/B		X	X	X			DR	PSU	Baums	3:32:21	27.686489	92.230034	361	X	
439	Leiopathes	J2-530	GB299	20-Oct-10	Q4A/B		X	X	X			DR	PSU	Baums	3:32:21	27.686489	92.230034	361	X	
440	Leiopathes	J2-530	GB299	20-Oct-10	Q6A		X	X	X			DR	PSU	Baums	7:12:44	27.685888	92.218976	358		
441	Leiopathes	J2-530	GB299	20-Oct-10	Q6B		X	X	X			DR	PSU	Baums	8:06:54	27.685089	92.220451	345		
442	Leiopathes	J2-530	GB299	20-Oct-10	Q6A		X	X	X		X	DR	PSU	Baums-Fisher	7:12:44	27.685888	92.218976	358		#17

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
442	Leiopathes	J2-530	GB299	20-Oct-10	Q6A/B		X	X	X			DR	PSU	Baums	NA	NA	NA	NA		
447	Leiopathes	J2-530	GB299	20-Oct-10	Q9B		X	X	X		X	DR	PSU	Baums-Fisher	8:48:46	27.684946	92.220405	343		white
448	Leiopathes	J2-530	GB299	20-Oct-10	Q9A		X	X	X		X	DR	PSU	Baums-Fisher	8:41:44	27.684949	92.220415	342		pink in the lab; white in the water
449	Leiopathes	J2-530	GB299	20-Oct-10	Q7A/B		X	X	X		X	DR	PSU	Baums-Fisher	8:06:54	27.685089	92.220451	345		different branch pattern; check on video to separate; check lab log to look at the pattern
450	Leiopathes	J2-530	GB299	20-Oct-10	Q7A/B		X	X	X		X	DR	PSU	Baums-Fisher	8:06:54	27.685089	92.220451	345		different branch pattern; check on video to separate; check lab log to look at the pattern
451	Leiopathes	J2-530	GB299	20-Oct-10	Q10A		X	X	X		X	DR	PSU	Baums-Fisher	9:01:02	27.684966	92.220391	343		white
452	Leiopathes	J2-530	GB299	20-Oct-10	Q10B		X	X	X		X	DR	PSU	Baums-Fisher	9:04:58	27.684971	92.220399	342		white
453	Leiopathes	J2-530	GB299	20-Oct-10	Blue Chamber			X				DR (inRNALater)	PSU	Baums	10:08:43	27.684599	92.220867	340		white
454	Callogorgia sp.	J2-530	GB299	20-Oct-10	Blue Chamber			X				AQ	Temple	Cordes	10:04:44	27.684599	92.220867	340		
455	Paramuricea sp. A	J2-530	GB299	20-Oct-10	Blue Chamber			X				AQ	Temple	Cordes	10:01:25	27.684603	92.220866	340		
456	Leiopathes	J2-530	GB299	20-Oct-10	Q12B		X	X	X		X	DR	PSU	Baums-Fisher	8:56:16	27.684958	92.220376	343		white; yellow in the lab
457	Leiopathes	J2-530	GB299	20-Oct-10	Q12A		X	X	X		X	DR	PSU	Baums-Fisher	8:54:25	27.684958	92.220376	343		"white" in the lab; pink in the water depending of the monitor
458	Leiopathes	J2-530	GB299	20-Oct-10	Q11A		X	X	X		X	DR	PSU	Baums-Fisher	8:18:35	27.684991	92.220535	344		white
459	Leiopathes	J2-530	GB299	20-Oct-10	Q11B		X	X	X		X	DR	PSU	Baums-Fisher	8:28:13	27.684908	91.220408	344		pink in the lab; pink in the water
2039	Gastroptychus sp.	J2-530	GB299	20-Oct-10	Q3B	on Leiopathes		X	X	X		CM-MN	USGS	Morrison	3:12:53	27.686510	92.230070	361		
2040	Chirostylid juvenile	J2-530	GB299	20-Oct-10	Q1A	on Leiopathes			X			CM-MN	USGS	Morrison	0:11:01	27.686316	92.230397	358		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2041	Gastroptychus sp.	J2-530	GB299	20-Oct-10	Q4A	on Leiopathes		X	X	X		CM-MN	USGS	Morrison	3:32:21	27.686489	92.230034	361		
2042	Chirostylid	J2-530	GB299	20-Oct-10	Q4A				X				USGS	Morrison	3:32:21	27.686489	92.230034	361		
3134	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q16A	Callogorgia LII-10-414	X				X		WHOI-PSU	Shank-Fisher	11:58:46	27.685886	92.228534	361	X	subsample to Erin for Fisher
3135	Gorgonocephalus sp.	J2-530	GB299	20-Oct-10	Biobox Stbd		X		X			TS	WHOI	Shank	8:23:29	27.684963	92.220522	344	X	Voucher 95% EtOH; subsample to Erin for Fisher
3136	ophiuroid morph 6	J2-530	GB299	20-Oct-10	Biobox Stbd	Antipatharian LII-10-417	X						WHOI	Shank	3:51:56	27.686547	92.229984	361	X	not morph 5 as previously indicated
3137	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Biobox Stbd	Paramuricea A LII-10-418	X		X		X	TS	WHOI-PSU	Shank-Fisher	4:48:15	27.686621	92.228677	361	X	Voucher 95% EtOH; subsample to Erin for Fisher
3138	Gorgonocephalus sp.	J2-530	GB299	20-Oct-10	Biobox Port		X						WHOI	Shank	9:34:46	27.684980	92.220486	342	X	subsample to Erin for Fisher
3139	Nematocarcinid shrimp	J2-530	GB299	20-Oct-10	push core box		X						WHOI	Shank	NA	NA	NA	NA	X	
3140	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Biobox Port	Paramuricea C? LII-10-421	X	X			X		WHOI-PSU	Shank-Fisher	9:28:12	27.684978	92.220482	342		subsample to Erin for Fisher
3141	Ophiuroid morph 11	J2-530	GB299	20-Oct-10	Blue Slurp	sediment	X		X		X	TS	WHOI-PSU	Shank-Fisher	9:42:29	27.684917	92.220470	344	X	Voucher 95% EtOH; subsample to Erin for Fisher
3142	Chirostylid	J2-530	GB299	20-Oct-10	Q3B	Leiopathes LII-10-422							WHOI	Shank	3:12:53	27.686510	92.230070	361	X	given to CM; NO SAMPLE
3144	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q2B	Callogorgia LII-10-428	X	X			X		WHOI-PSU	Shank-Fisher	0:00:13	27.686381	92.230232	358		subsample to Erin for Fisher
3145	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q17	Paramuricea A LII-10-431	X	X			X		WHOI-PSU	Shank-Fisher	12:10:39	27.685886	92.228534	361	X	subsample to Erin for Fisher
3146	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q17	Paramuricea A LII-10-431	X						WHOI	Shank	12:10:39	27.685886	92.228534	361	X	subsample to Erin for Fisher
3147	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q17	Callogorgia LII-10-435	X				X		WHOI-PSU	Shank-Fisher	12:10:39	27.685886	92.228534	361		subsample to Erin for Fisher

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3149	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Q16A	Callogorgia LII-10-454		X					WHOI	Shank	11:58:46	27.685886	92.228534	361		cut into pieces and stored at 4C in RNALater O/N then frozen at -80C
3150	Asteroschema sp. 1	J2-530	GB299	20-Oct-10	Blue Chamber	Paramuricea LII-10-455		X					WHOI	Shank	10:01:25	27.684603	92.220866	340		cut into pieces and stored at 4C in RNALater O/N then frozen at -80C
3153	Ophiuroid morph 11	J2-530	GB299	20-Oct-10	Blue slurp	sediment	X					NRDA	WHOI-NRDA	Shank	9:42:29	27.684917	92.220470	344		1 to Shank; 2 to NRDA: GU2792-A1020-01
3154	anemone	J2-530	GB299	20-Oct-10	Basket		X					NRDA	WHOI-NRDA	Shank	10:16:15	27.684595	92.220868	340		Venus anemone; 1 to Shank; 2 to NRDA: GU2792-A1020-TE9-02
3155	Hoplostethus occidentalis	J2-530	GB299	20-Oct-10	Basket		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	NA	NA	NA	NA		Fish; 1 to Shank; 2 to AQ; 3 to Fisher; 4 to NRDA: GU2792-A1020-TE9-03
4054	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	10:36:15	27.427884	-93.583429	341		
4055	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	10:36:15	27.427884	-93.583429	341		
4056	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	10:36:15	27.427884	-93.583429	341		
4057	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC1							AD	USGS	Demopoulos	2:51:13	27.686606	-92.231084	363		
4058	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC1							AD	USGS	Demopoulos	2:51:13	27.686606	-92.231084	363		
4059	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC1							AD	USGS	Demopoulos	2:51:13	27.686606	-92.231084	363		
4060	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC2							AD	USGS	Demopoulos	1:49:56	27.686520	-92.230737	361		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4061	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC2							AD	USGS	Demopoulos	1:49:56	27.686520	-92.230737	361		
4062	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC2							AD	USGS	Demopoulos	1:49:56	27.686520	-92.230737	361		
4063	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC3							AD	USGS	Demopoulos	1:43:49	27.686551	-92.230745	361		
4064	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC3							AD	USGS	Demopoulos	1:43:49	27.686551	-92.230745	361		
4065	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC3							AD	USGS	Demopoulos	1:43:49	27.686551	-92.230745	361		
4066	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC4							AD	USGS	Demopoulos	1:45:53	27.686538	-92.230745	361		
4067	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC4							AD	USGS	Demopoulos	1:45:53	27.686538	-92.230745	361		
4068	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC4							AD	USGS	Demopoulos	1:45:53	27.686538	-92.230745	361		
4069	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC5							AD	USGS	Demopoulos	10:30:24	27.684691	-92.221027	341		
4070	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC5							AD	USGS	Demopoulos	10:30:24	27.684691	-92.221027	341		
4071	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC5							AD	USGS	Demopoulos	10:30:24	27.684691	-92.221027	341		
4072	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC7							AD	USGS	Demopoulos	10:38:54	27.684706	-92.221040	341		
4073	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC7							AD	USGS	Demopoulos	10:38:54	27.684706	-92.221040	341		
4074	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC7							AD	USGS	Demopoulos	10:38:54	27.684706	-92.221040	341		
4075	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC9							AD	USGS	Demopoulos	2:47:44	27.686598	-92.231054	363		
4076	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC9							AD	USGS	Demopoulos	2:47:44	27.686598	-92.231054	363		
4077	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC9							AD	USGS	Demopoulos	2:47:44	27.686598	-92.231054	363		
4078	Sediment (0-2 cm)	J2-530	GB299	20-Oct-10	PC10							AD	USGS	Demopoulos	2:49:41	27.686603	-92.231073	363		
4079	Sediment (2-5 cm)	J2-530	GB299	20-Oct-10	PC10							AD	USGS	Demopoulos	2:49:41	27.686603	-92.231073	363		
4080	Sediment (5-10 cm)	J2-530	GB299	20-Oct-10	PC10							AD	USGS	Demopoulos	2:49:41	27.686603	-92.231073	363		
5009	Methane9	J2-530	GB299	20-Oct-10	Niskin H							BD	FSU	McDonald	12:14:04	27.685937	-92.228673	358		
6011	rock	J2-530	GB299	20-Oct-10	rock box							DF	LSU	Roberts	3:12:53	27.686538	-92.230110	361		
6012	rock	J2-530	GB299	20-Oct-10	rock box							DF	LSU	Roberts	6:07:37	27.687159	-92.221351	363		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4081	Sediment (0-2 cm)	J2-531	GB535	20-Oct-10	PC1							AD	USGS	Demopoulos	23:39:05	27.427876	-93.583439	516		
4082	Sediment (2-5 cm)	J2-531	GB535	20-Oct-10	PC1							AD	USGS	Demopoulos	23:39:05	27.427876	-93.583439	516		
4083	Sediment (5-10 cm)	J2-531	GB535	20-Oct-10	PC1							AD	USGS	Demopoulos	23:39:05	27.427876	-93.583439	516		
4093	Sediment (0-2 cm)	J2-531	GB535	20-Oct-10	PC9							AD	USGS	Demopoulos	23:27:31	27.427883	-93.583432	516		
4094	Sediment (2-5 cm)	J2-531	GB535	20-Oct-10	PC9							AD	USGS	Demopoulos	23:27:31	27.427883	-93.583432	516		
4095	Sediment (5-10 cm)	J2-531	GB535	20-Oct-10	PC9							AD	USGS	Demopoulos	23:27:31	27.427883	-93.583432	516		
4096	Sediment (0-2 cm)	J2-531	GB535	20-Oct-10	PC10							AD	USGS	Demopoulos	23:31:51	27.427884	-93.583429	515		
4097	Sediment (2-5 cm)	J2-531	GB535	20-Oct-10	PC10							AD	USGS	Demopoulos	23:31:51	27.427884	-93.583429	515		
4098	Sediment (5-10 cm)	J2-531	GB535	20-Oct-10	PC10							AD	USGS	Demopoulos	23:31:51	27.427884	-93.583429	515		
5010	Methane10	J2-531	GB535	20-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
6013	rock	J2-531	GB535	20-Oct-10	rock box							DF	LSU	Roberts	2:21:23	27.427188	-93.585659	527		
59	water	RB-10-07_005	GB535	20-Oct-10	Niskin 12								Temple	Cordes	19:48:36	27.428167	-93.582167	3		
60	water	RB-10-07_005	GB535	20-Oct-10	Niskin 11								Temple	Cordes	19:48:36	27.428167	-93.582167	3		
61	water	RB-10-07_005	GB535	20-Oct-10	Niskin 10								Temple	Cordes	19:48:36	27.428167	-93.582167	100		
62	water	RB-10-07_005	GB535	20-Oct-10	Niskin 9								Temple	Cordes	19:48:36	27.428167	-93.582167	100		
63	water	RB-10-07_005	GB535	20-Oct-10	Niskin 8								Temple	Cordes	19:48:36	27.428167	-93.582167	200		
64	water	RB-10-07_005	GB535	20-Oct-10	Niskin 7								Temple	Cordes	19:48:36	27.428167	-93.582167	200		
65	water	RB-10-07_005	GB535	20-Oct-10	Niskin 6								Temple	Cordes	19:48:36	27.428167	-93.582167	300		
66	water	RB-10-07_005	GB535	20-Oct-10	Niskin 5								Temple	Cordes	19:48:36	27.428167	-93.582167	300		
67	water	RB-10-07_005	GB535	20-Oct-10	Niskin 4								Temple	Cordes	19:48:36	27.428167	-93.582167	400		
68	water	RB-10-07_005	GB535	20-Oct-10	Niskin 3								Temple	Cordes	19:48:36	27.428167	-93.582167	400		
69	water	RB-10-07_005	GB535	20-Oct-10	Niskin 2								Temple	Cordes	19:48:36	27.428167	-93.582167	490		
70	water	RB-10-07_005	GB535	20-Oct-10	Niskin 1								Temple	Cordes	19:48:36	27.428167	-93.582167	490		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
71	water	J2-531	GB535	21-Oct-10	Niskin B								Temple	Cordes	22:51:50	27.427962	-93.583389	510		niskin A is stated in VV log
72	water	J2-531	GB535	21-Oct-10	Niskin C								Temple	Cordes	3:13:55	27.425963	-93.590170	524		
73	water	J2-531	GB535	21-Oct-10	Niskin D								Temple	Cordes	0:38:59	27.427421	-93.584817	513		
74	water	J2-531	GB535	21-Oct-10	Niskin E								Temple	Cordes	1:52:05	27.427224	-93.585367	515		
75	water	J2-531	GB535	21-Oct-10	Niskin G								Temple	Cordes	5:40:08	27.425210	-93.592759	534		
460	Tanacetipathes?	J2-531	GB535	21-Oct-10	Q1A		X	X	X			DR	Temple	Cordes	3:49:07	27.425930	93.590513	527		
461	Acanthogorgia cf. armata	J2-531	GB535	21-Oct-10	Q1B		X	X	X			AQ	Temple	Cordes	5:17:30	27.425569	-93.592232	535	X	micro photo; with eggs?
462	Paramuriceide	J2-531	GB535	21-Oct-10	Q5A		X	X	X			AQ	Temple	Cordes	4:12:17	27.425911	93.590722	528	X	
463	Muriceides sp.?	J2-531	GB535	21-Oct-10	Q4B		X	X	X			AQ	Temple	Cordes	6:49:52	27.421863	93.595077	538	X	
464	Octocoral-white bushy	J2-531	GB535	21-Oct-10	Q2B		X	X	X			AQ	Temple	Cordes	3:06:15	27.426013	93.589442	523		
465	Acanthogorgia cf. armata	J2-531	GB535	21-Oct-10	Q3B		X	X	X			AQ	Temple	Cordes	3:37:35	27.425934	93.590445	527		
466	Alcyonacean-yellow	J2-531	GB535	21-Oct-10	Q7B		X	X	X			AQ	Temple	Cordes	8:17:58	27.421338	93.595971	542	X	micro photo
467	Muriceides sp.?	J2-531	GB535	21-Oct-10	Q3A		X	X	X			AQ	Temple	Cordes	2:25:35	27.427188	93.585600	527		
1043	Cerianthid tube anemone	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1043	Cerianthid tube anemone	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1043	Cerianthid tube anemone	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1043	Cerianthid tube anemone	J2-531	GB535	21-Oct-10	MPB							CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1044	red non-feathery polychaete	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		photos taken on Erik's microscope camera 21 Oct 2010

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1044	red non-feathery polychaete	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1044	red non-feathery polychaete	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1045	red feathery polychaete	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		photos taken on Erik's microscope camera 21 Oct 2010
1046	Polynoid	J2-531	GB535	21-Oct-10	MPB							CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1047	Terrebellid	J2-531	GB535	21-Oct-10	MPB							CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1048	Arc shell	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1049	Glycera tesselata	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		
1050	Eunice sp.	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		posterior end
1051	Coralliophilia sp.	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		without shell
1051	Coralliophilia sp.	J2-531	GB535	21-Oct-10	MPB						X		PSU	Fisher	11:41:24	27.428006	93.583563	517		without shell
1052	hydroid	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1052	hydroid	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1052	hydroid	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1052	hydroid	J2-531	GB535	21-Oct-10	MPB							CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1053	stolonifera	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1053	stolonifera	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1054	sponge (white)	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		
1055	Lophelia pertusa	J2-531	GB535	21-Oct-10	MPB						X	CF	PSU	Fisher	11:41:24	27.428006	93.583563	517		tissue and skeleton from several polyps
2043	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q1B	LII-10-2043		X				JL	Temple	Cordes	NA	NA	NA	NA		Could be contamination of Q1A-1B; two times listed for 1B in VV

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2043	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q1B			X	X	X		CM	USGS	Morrison	NA	NA	NA	NA		Could be contamination of Q1A-1B; two times listed for 1B in VV
2044	Eunicid	J2-531	GB535	21-Oct-10	Q1B			X				CM-MN	USGS	Morrison	NA	NA	NA	NA		Could be contamination of Q1A-1B; two times listed for 1B in VV
2045	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q7B	LII-10-2045		X				JL	Temple	Cordes	8:17:58	27.421338	93.595971	542		
2045	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q7B			X	X	X		CM	USGS	Morrison	8:17:58	27.421338	93.595971	542		
2046	Munidopsis	J2-531	GB535	21-Oct-10	Q7B			X	X	X		CM-MN	USGS	Morrison	8:17:58	27.421338	93.595971	542		
2047	Lophelia pertusa	J2-531	GB535	21-Oct-10	Red Chamber	LII-10-2047		X				JL	Temple	Cordes	0:17:09	27.427402	93.584929	517		
2047	Lophelia pertusa	J2-531	GB535	21-Oct-10	Red Chamber	LII-10-2047		X				JL	Temple	Cordes	0:17:09	27.427402	93.584929	517		
2047	Lophelia pertusa	J2-531	GB535	21-Oct-10	Red Chamber	LII-10-2047		X				JL	Temple	Cordes	0:17:09	27.427402	93.584929	517		
2047	Lophelia pertusa	J2-531	GB535	21-Oct-10	Red Chamber							CM	USGS	Morrison	0:17:09	27.427402	93.584929	517		
2048	Eunicid	J2-531	GB535	21-Oct-10	Red Chamber			X	X	X		CM-MN	USGS	Morrison	0:17:09	27.427402	93.584929	517		
2049	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q3B				X			CM	USGS	Morrison	3:35:50	27.425934	93.590445	527		
2050	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q3A			X	X	X		CM	USGS	Morrison	3:07:24	27.426013	93.589441	523		
2051	Munidopsis juvenile	J2-531	GB535	21-Oct-10	Q3A			X	X	X		CM-MN	USGS	Morrison	3:07:24	27.426013	93.589441	523		
2052	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q10A				X	X		CM	USGS	Morrison	8:07:35	27.421343	93.595966	542		
2053	Munidopsis	J2-531	GB535	21-Oct-10	Q10A			X	X			CM-MN	USGS	Morrison	8:07:35	27.421343	93.595966	542		
2054	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q7A			X	X	X		CM	USGS	Morrison	7:13:52	27.421396	93.595735	540		
2055	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q9A			X	X			CM	USGS	Morrison	7:55:06	27.421386	93.595923	543		
2056	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q4A			X	X	X		CM	USGS	Morrison	6:45:58	27.421863	93.595077	538		
2057	Eunicid	J2-531	GB535	21-Oct-10	Q4A			X	X	X		CM-MN	USGS	Morrison	6:45:58	27.421863	93.595077	538		
2058	Lophelia pertusa	J2-531	GB535	21-Oct-10	MPB							CM	USGS	Morrison	11:41:24	27.428006	93.583563	517		
2059	Eunicid	J2-531	GB535	21-Oct-10	Basket							CM-MN	USGS	Morrison	NA	NA	NA	NA		on Lophelia collection on basket
2060	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q2A			X	X	X		CM	USGS	Morrison	0:09:18	27.427404	93.584928	518		

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2061	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q6A			X	X	X		CM	USGS	Morrison	5:50:51	27.425162	93.592921	536		
2062	Munidopsis juvenile	J2-531	GB535	21-Oct-10	MPB				X			CM-MN	USGS	Morrison	11:41:24	27.428006	93.583563	517		
2063	Munidopsis juvenile	J2-531	GB535	21-Oct-10	MPB							CM-MN	USGS	Morrison	11:41:24	27.428006	93.583563	517		
2064	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q5A			X	X	X		CM	USGS	Morrison	4:03:02	27.425911	93.590724	528		
2065	Lophelia pertusa	J2-531	GB535	21-Oct-10	Q5B			X	X	X		CM	USGS	Morrison	6:41:11	27.421863	93.595077	538		
2066	Munidopsis	J2-531	GB535	21-Oct-10	Basket				X			CM-MN	USGS	Morrison	NA	NA	NA	NA		
3156	Aplacophoran	J2-531	GB535	21-Oct-10	Q4B	Muriceides? LII-10-463	X						WHOI	Shank	6:49:52	27.421863	93.595077	538	X	
3157	Yellow sponge	J2-531	GB535	21-Oct-10	Q7B	Lophelia LII-10-2045	X						WHOI	Shank	8:17:58	27.421338	93.595971	542	X	Ferrea?
3158	Hydroids	J2-531	GB535	21-Oct-10	Q7B	Lophelia LII-10-2045	X						WHOI	Shank	8:17:58	27.421338	93.595971	542		
3159	Yellow things	J2-531	GB535	21-Oct-10	Q7B	Sponge TS3157 and Lophelia LII-10-2045							WHOI	Shank	8:17:58	27.421338	93.595971	542	X	went to AQ as they might be octocorals
3160	Hydroids	J2-531	GB535	21-Oct-10	Red Chamber	Lophelia LII-10-2047		X					WHOI	Shank	0:17:09	27.427402	93.584929	517		incubate at 4C in RNALater O/N and freeze at -80C
3161	anemone	J2-531	GB535	21-Oct-10	Red Chamber	Lophelia LII-10-2047		X					WHOI	Shank	0:17:09	27.427402	93.584929	517		incubate at 4C in RNALater O/N and freeze at -80C
3162	Glass white sponge	J2-531	GB535	21-Oct-10	Red Chamber	Lophelia LII-10-2047		X					WHOI	Shank	0:17:09	27.427402	93.584929	517	X	incubate at 4C in RNALater O/N and freeze at -80C
3163	Sabellid worm	J2-531	GB535	21-Oct-10	Red Chamber	Lophelia LII-10-2047		X					WHOI	Shank	0:17:09	27.427402	93.584929	517		incubate at 4C in RNALater O/N and freeze at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3164	Aplacophoran	J2-531	GB535	21-Oct-10	Q3A	Muriceides? LII-10-467	X						WHOI	Shank	2:25:35	27.427188	93.585600	527		
3165	Hydroids	J2-531	GB535	21-Oct-10	Q3B	Lophelia LII-10-2049	X						WHOI	Shank	3:35:50	27.425934	93.590445	527	X	
3166	Hydroids with worm tubes	J2-531	GB535	21-Oct-10	Q3A	Muriceides? LII-10-467	X						WHOI	Shank	2:25:35	27.427188	93.585600	527		
3167	Polychaete morph 10	J2-531	GB535	21-Oct-10	Q3A	Lophelia LII-10-2050			X				WHOI	Shank	3:07:24	27.426013	93.589441	523	X	Voucher
3168	Glass white sponge	J2-531	GB535	21-Oct-10	Q3A	Lophelia LII-10-2049	X						WHOI	Shank	3:07:24	27.426013	93.589441	523		
3169	Hydroids	J2-531	GB535	21-Oct-10	Q3B	Lophelia LII-10-2052	X						WHOI	Shank	3:35:50	27.425934	93.590445	527		
3170	worm tubes	J2-531	GB535	21-Oct-10	Q10A	Lophelia LII-10-2052	X						WHOI	Shank	8:07:35	27.421343	93.595966	542		
3171	Aplacophoran	J2-531	GB535	21-Oct-10	Q10A	Muriceides? LII-10-467	X						WHOI	Shank	8:07:35	27.421343	93.595966	542		
3172	Yellow sponge	J2-531	GB535	21-Oct-10	Q3A	Lophelia LII-10-2054	X						WHOI	Shank	3:07:24	27.426013	93.589441	523		
3173	White sponge	J2-531	GB535	21-Oct-10	Q7A	Lophelia LII-10-2054	X						WHOI	Shank	7:13:52	27.421396	93.595735	540		
3174	Hydroids	J2-531	GB535	21-Oct-10	Q7A	Lophelia LII-10-2054	X						WHOI	Shank	7:13:52	27.421396	93.595735	540		
3175	worm tubes	J2-531	GB535	21-Oct-10	Q7A	Lophelia LII-10-2054	X						WHOI	Shank	7:13:52	27.421396	93.595735	540		
3176	Polychaete morph 11	J2-531	GB535	21-Oct-10	Q3A	Lophelia LII-10-2050			X				WHOI	Shank	3:07:24	27.426013	93.589441	523	X	Voucher
3177	Hydroids	J2-531	GB535	21-Oct-10	Q9A	Lophelia LII-10-2055	X						WHOI	Shank	7:55:06	27.421386	93.595923	543		
3178	Zoanthids	J2-531	GB535	21-Oct-10	Q4A	Lophelia LII-10-2056	X						WHOI	Shank	6:45:58	27.421863	93.595077	538		
3179	Hydroids	J2-531	GB535	21-Oct-10	Q4A	Lophelia LII-10-2056	X						WHOI	Shank	6:45:58	27.421863	93.595077	538		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3180	Polynoid	J2-531	GB535	21-Oct-10	Q4A	Lophelia LII-10-2056	X						WHOI	Shank	6:45:58	27.421863	93.595077	538		
3181	Sabellid worm	J2-531	GB535	21-Oct-10	Basket	Lophelia LII-10-2047	X						WHOI	Shank	NA	NA	NA	NA		
3182	Hydroids	J2-531	GB535	21-Oct-10	Basket	Lophelia LII-10-2047	X						WHOI	Shank	NA	NA	NA	NA		
3183	White sponge	J2-531	GB535	21-Oct-10	Q4A	Lophelia LII-10-2056	X						WHOI	Shank	6:45:58	27.421863	93.595077	538		
3184	Unidentified polychaete	J2-531	GB535	21-Oct-10	Basket	Lophelia LII-10-2047			X				WHOI	Shank	NA	NA	NA	NA	X	Voucher
3185	Polychaete morph 10	J2-531	GB535	21-Oct-10	Basket	Lophelia LII-10-2047	X						WHOI	Shank	NA	NA	NA	NA		
3186	Hydroids	J2-531	GB535	21-Oct-10	Q5A	Lophelia LII-10-2064	X						WHOI	Shank	4:03:02	27.425911	93.590724	528		
3187	Gastropod snail morph 2	J2-531	GB535	21-Oct-10	NA	NA							WHOI	Shank	NA	NA	NA	NA		Found in Quiver after it was rinsed out
4084	Sediment (0-2 cm)	J2-531	GB535	21-Oct-10	PC2							AD	USGS	Demopoulos	2:10:04	27.427210	-93.585295	520		
4085	Sediment (2-5 cm)	J2-531	GB535	21-Oct-10	PC2							AD	USGS	Demopoulos	2:10:04	27.427210	-93.585295	520		
4086	Sediment (5-10 cm)	J2-531	GB535	21-Oct-10	PC2							AD	USGS	Demopoulos	2:10:04	27.427210	-93.585295	520		
4087	Sediment (0-2 cm)	J2-531	GB535	21-Oct-10	PC3							AD	USGS	Demopoulos	2:12:15	27.427213	-93.585294	520		
4088	Sediment (2-5 cm)	J2-531	GB535	21-Oct-10	PC3							AD	USGS	Demopoulos	2:12:15	27.427213	-93.585294	520		
4089	Sediment (5-10 cm)	J2-531	GB535	21-Oct-10	PC3							AD	USGS	Demopoulos	2:12:15	27.427213	-93.585294	520		
4090	Sediment (0-2 cm)	J2-531	GB535	21-Oct-10	PC4							AD	USGS	Demopoulos	2:14:32	27.427214	-93.585310	520		
4091	Sediment (2-5 cm)	J2-531	GB535	21-Oct-10	PC4							AD	USGS	Demopoulos	2:14:32	27.427214	-93.585310	520		
4092	Sediment (5-9 cm)	J2-531	GB535	21-Oct-10	PC4							AD	USGS	Demopoulos	2:14:32	27.427214	-93.585310	520		
5011	Methane11	J2-531	GB535	21-Oct-10	NA							BD	FSU	McDonald	NA	NA	NA	NA		
5024	Coral-Live/Dead	J2-531	GB535	21-Oct-10	NA							BD	FSU	McDonald	NA	NA	NA	NA		
5033	water-DIC	J2-531	GB535	21-Oct-10	NA							BD	FSU	McDonald	NA	NA	NA	NA		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
76	water	J2-532	GC140	21-Oct-10	Niskin B								Temple	Cordes	23:35:00	27.811771	-91.535979	320		not logged in VV log
77	water	J2-532	GC140	21-Oct-10	Niskin C								Temple	Cordes	23:35:00	27.811771	-91.535979	320		not logged in VV log
78	water	J2-532	GC140	21-Oct-10	Niskin D								Temple	Cordes	23:35:00	27.811771	-91.535979	320		not logged in VV log
80	water	J2-532	GC140	21-Oct-10	Niskin G								Temple	Cordes	23:56:03	27.811827	-91.536107	316		
492	Isididae	J2-532	GC140	21-Oct-10	Q3A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	23:49:48	27.811700	91.535963	321	X	micro photo
507	Isididae	J2-532	GC140	21-Oct-10	Q2A		X	X	X			AQ	Temple	Cordes	23:18:36	27.811750	91.535948	321		
508	Paramuricea multispina	J2-532	GC140	21-Oct-10	Q2A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	23:14:35	27.811750	91.535949	320	X	
3188	Tubeworm - Escarpia	J2-532	GC140	21-Oct-10	Blender A			X					WHOI	Shank	23:32:47	27.811776	-91.535995	322		broke up out of tube; soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate
3189	Tubeworm - Escarpia	J2-532	GC140	21-Oct-10	Blender A			X					WHOI	Shank	23:32:47	27.811776	-91.535995	322		broke up out of tube; soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3190	Tubeworm - Escarpia	J2-532	GC140	21-Oct-10	Blender A			X					WHOI	Shank	23:32:47	27.811776	-91.535995	322		broke up out of tube; soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate
3191	Tubeworm - Escarpia	J2-532	GC140	21-Oct-10	Blender A			X					WHOI	Shank	23:32:47	27.811776	-91.535995	322		juvenile; no vestimentum; broke up out of tube; soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate
3204	Astrogomphus	J2-532	GC140	21-Oct-10	Q3A	Bamboo coral LII-10-492	X	X	X		X	TS	WHOI-PSU	Shank-Fisher	23:49:48	27.811700	91.535963	321	X	Erin subsampled for isotopes to Fisher
3205	Astrogomphus	J2-532	GC140	21-Oct-10	Q3A	Bamboo coral LII-10-492	X		X		X	TS	WHOI-PSU	Shank-Fisher	23:49:48	27.811700	91.535963	321	X	Voucher; Erin subsampled for isotopes to Fisher
3219	Asteroschema sp. 1	J2-532	GC140	21-Oct-10	Q2A	Paramuricea multispina LII-10-508	X				X		WHOI-PSU	Shank-Fisher	23:14:35	27.811750	91.535949	320		Erin subsampled for isotopes to Fisher
4112	Sediment	J2-532	GC140	21-Oct-10	PC9							NRDA	USGS-NRDA	Demopoulos	23:31:51	27.810808	-91.537097	264		
79	water	J2-532	GC140	22-Oct-10	Niskin F								Temple	Cordes	12:01:58	27.803628	-91.540917	284		
468	Leiopathes	J2-532	GC140	22-Oct-10	Q18A		X	X	X			DR	PSU	Baums	9:51:00	27.809584	91.539479	250	X	pink in situ; pink on surface

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
469	Leiopathes	J2-532	GC140	22-Oct-10	Q18B		X	X	X			DR	PSU	Baums	10:01:18	27.809584	91.539479	248	X	white in situ; pink on surface
470	Leiopathes	J2-532	GC140	22-Oct-10	Q14A		X	X	X		X	DR	PSU	Baums-Fisher	9:37:08	27.809584	91.539479	249		white in situ; pink on surface
471	Leiopathes	J2-532	GC140	22-Oct-10	Q13A		X	X	X			DR	PSU	Baums	9:22:44	27.809584	91.539479	251		white in situ; pink on surface
472	Leiopathes	J2-532	GC140	22-Oct-10	Q16A		X	X	X			DR	PSU	Baums	10:46:21	27.809549	91.539480	284		white in situ; white on surface
473	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q16A		X	X	X				Temple	Cordes	10:46:21	27.809549	91.539480	284		
474	Leiopathes	J2-532	GC140	22-Oct-10	Q15B		X	X	X		X	DR	PSU	Baums-Fisher	9:44:32	27.809584	91.539479	250		white in situ; pink on surface
475	Leiopathes	J2-532	GC140	22-Oct-10	Q13B		X	X	X			DR	PSU	Baums	9:29:36	27.809584	91.539479	250	X	orange on surface; yellow in situ?
476	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q16B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	10:50:55	27.809548	91.539478	283	X	
477	Leiopathes	J2-532	GC140	22-Oct-10	Q16A		X	X	X			DR	PSU	Baums	10:46:21	27.809549	91.539480	284	X	white in situ; pink on surface
478	Leiopathes	J2-532	GC140	22-Oct-10	Q16B		X	X	X			DR	PSU	Baums	11:00:58	27.809563	91.539429	289	X	pink in situ; pink on surface
479	Leiopathes	J2-532	GC140	22-Oct-10	Q15A		X	X	X			DR	PSU	Baums	9:40:42	27.809584	91.539479	250	X	pink in situ; pink on surface
480	Antipatharian-bushy	J2-532	GC140	22-Oct-10	Q8A		X	X	X			DR	PSU	Baums	2:54:55	27.811053	91.537409	262	X	
481	Leiopathes	J2-532	GC140	22-Oct-10	Q8B		X	X	X			DR	PSU	Baums	3:09:17	27.811065	91.537235	261	X	white in situ; pink on surface
482	Antipathes	J2-532	GC140	22-Oct-10	Q8C		X	X	X			DR	PSU	Baums	5:27:01	27.810451	91.536978	251	X	
483	Muriceides sp.?	J2-532	GC140	22-Oct-10	Q8B		X	X	X			AQ	Temple	Cordes	3:15:19	27.811076	91.537220	262	X	
484	Leiopathes	J2-532	GC140	22-Oct-10	Q11A		X	X	X			DR	PSU	Baums	5:43:29	27.810437	91.536930	251	X	pink in situ; pink on surface

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
485	Leiopathes	J2-532	GC140	22-Oct-10	Q11B		X	X	X		X	DR	PSU	Baums-Fisher	6:45:55	27.810185	91.537063	249		white in situ; white on surface
486	Leiopathes	J2-532	GC140	22-Oct-10	Q6B		X	X	X			DR	PSU	Baums	4:58:13	27.810496	91.536981	255	X	pink on surface
487	Nicella-white	J2-532	GC140	22-Oct-10	Q6A		X	X	X			AQ	Temple	Cordes	2:31:47	27.811354	91.537543	262	X	net-like
488	Antipathes	J2-532	GC140	22-Oct-10	Q6A		X	X	X			DR	PSU	Baums	2:36:53	27.811354	91.537543	262	X	
489	Leiopathes	J2-532	GC140	22-Oct-10	Q5B		X	X	X			DR	PSU	Baums	1:41:30	27.811638	91.537624	266		orange in situ; orange on surface
490	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q5B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	1:35:58	27.811641	91.537621	266		
491	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q5A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:17:53	27.811666	91.536554	294		
493	Paramuricea multispina	J2-532	GC140	22-Oct-10	Q3B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:48:23	27.811672	91.536993	279	X	
494	Leiopathes	J2-532	GC140	22-Oct-10	Q9A		X	X	X			DR	PSU	Baums	5:09:40	27.810474	91.536992	252		pink on surface; with eggcase
495	Leiopathes	J2-532	GC140	22-Oct-10	Q9B		X	X	X			DR	PSU	Baums	5:17:04	27.810488	91.536969	252		pink on surface
496	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q1A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:08:42	27.811672	91.536578	295		
497	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q1B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	2:14:32	27.811360	91.537568	260		
498	Leiopathes	J2-532	GC140	22-Oct-10	Biobox		X	X	X			DR	PSU	Baums	5:39:37	27.810437	91.536965	250	X	white in situ; pink on surface
499	Leiopathes	J2-532	GC140	22-Oct-10	Q4B		X	X	X			DR	PSU	Baums	2:08:08	27.811361	91.537568	260		
500	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q4B		X	X	X		X		Temple-PSU	Cordes-Fisher	2:23:25	27.811365	91.537578	260		
501	Paramuricea	J2-532	GC140	22-Oct-10	Q4A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	2:00:26	27.811412	91.537548	260		
502	Leiopathes	J2-532	GC140	22-Oct-10	Q4A		X	X	X		X	DR	PSU	Baums-Fisher	1:59:52	27.811412	91.537548	261		
503	Leiopathes	J2-532	GC140	22-Oct-10	Q7A		X	X	X			DR	PSU	Baums	4:24:36	27.810545	91.536961	256		white in situ
504	Muriceides sp.?	J2-532	GC140	22-Oct-10	Q7B		X	X	X			AQ	Temple	Cordes	4:34:12	27.810544	91.536977	255	X	yellow

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
505	Antipatharian-bushy	J2-532	GC140	22-Oct-10	Q7B		X	X	X		X	DR	PSU	Baums-Fisher	4:37:13	27.810544	91.536977	255		little tissue for SI
506	Callogorgia cf. gracilis	J2-532	GC140	22-Oct-10	Q2B		X	X	X			AQ	Temple	Cordes	0:39:23	27.811685	91.537008	279		
509	Antipathes	J2-532	GC140	22-Oct-10	Q10B		X	X	X		X	DR	PSU	Baums-Fisher	7:04:14	27.810161	91.537097	251	X	
510	Leiopathes	J2-532	GC140	22-Oct-10	Q10A		X	X	X			DR	PSU	Baums	6:59:28	27.810161	91.537097	251		white in situ; white on surface
511	Leiopathes	J2-532	GC140	22-Oct-10	Q17A		X	X	X			DR	PSU	Baums	10:12:57	27.809034	-91.537264	253		Alive
3192	Gorgonocephalid arm	J2-532	GC140	22-Oct-10	Q14A	Leiopathes LII-10-470	X				X		WHOI-PSU	Shank-Fisher	9:37:08	27.809584	91.539479	249		just arms; Erin subsampled for isotopes to Fisher
3193	Barnacle morph 3	J2-532	GC140	22-Oct-10	Q14A	Leiopathes LII-10-470	X						WHOI	Shank	9:37:08	27.809584	91.539479	249		
3194	Ophiacanthid	J2-532	GC140	22-Oct-10	Q16B	Callogorgia LII-10-476	X		X		X	TS	WHOI-PSU	Shank-Fisher	11:00:58	27.809563	91.539429	289	X	Voucher; Erin subsampled for isotopes to Fisher
3195	stalked barnacles	J2-532	GC140	22-Oct-10	Biobox	Leiopathes LII-10-498	X		X			TS	WHOI	Shank	5:39:37	27.810437	91.536965	250	X	Voucher
3196	Amphipod morph 4	J2-532	GC140	22-Oct-10	Q8B	Muriceides LII-10-483			X			TS	WHOI	Shank	3:15:19	27.811076	91.537220	262	X	Voucher
3197	Asteroschema sp. 2	J2-532	GC140	22-Oct-10	Q6A	Nicella white LII-10-487	X		X		X	TS	WHOI-PSU	Shank-Fisher	2:31:47	27.811354	91.537543	262	X	banded arms; Voucher; Erin subsampled for isotopes to Fisher
3198	Anemone	J2-532	GC140	22-Oct-10	Q6A	Nicella white LII-10-487	X						WHOI	Shank	2:31:47	27.811354	91.537543	262		
3199	Barnacle morph 4	J2-532	GC140	22-Oct-10	Q6A	Antipatharian LII-10-488	X						WHOI	Shank	2:36:53	27.811354	91.537543	262		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3200	Asteroschema sp. 2	J2-532	GC140	22-Oct-10	Q5B	LII-10-490	X	X			X		WHOI-PSU	Shank-Fisher	1:35:58	27.811641	91.537621	266		accidentally put in -20C for 15 minutes before putting in RNALater and store 4C O/N then freeze at-80C; Erin subsampled for isotopes to Fisher
3201	Ophiacanthid	J2-532	GC140	22-Oct-10	Q5B	LII-10-490	X				X		WHOI-PSU	Shank-Fisher	1:35:58	27.811641	91.537621	266		Erin subsampled for isotopes to Fisher
3202	Asteroschema sp. 2	J2-532	GC140	22-Oct-10	Q5A	Callogorgia LII-10-491	X				X		WHOI-PSU	Shank-Fisher	0:17:53	27.811666	91.536554	294		only got a bit of arm; Erin subsampled for isotopes to Fisher
3203	Asteroschema sp. 1	J2-532	GC140	22-Oct-10	Q3B	Paramuricea multispina LII-10-493	X	X			X		WHOI-PSU	Shank-Fisher	0:48:23	27.811672	91.536993	279	X	Erin subsampled for isotopes to Fisher
3206	Barnacle morph 1	J2-532	GC140	22-Oct-10	Q9A	Leiopathes LII-10-494	X						WHOI	Shank	5:09:40	27.810474	91.536992	252		
3207	Asteroschema sp. 1	J2-532	GC140	22-Oct-10	Q1A	Callogorgia LII-10-496	X	X			X		WHOI-PSU	Shank-Fisher	0:08:42	27.811672	91.536578	295		Erin subsampled for isotopes to Fisher; a) in Ambion RNALater; b) in Shankmade RNALater
3208	Barnacle morph 4 (large)	J2-532	GC140	22-Oct-10	Biobox	Leiopathes LII-10-498	X		X			TS	WHOI	Shank	5:39:37	27.810437	91.536965	250	X	Voucher
3209	Asteroschema sp. 2	J2-532	GC140	22-Oct-10	Q1B	Callogorgia LII-10-497	X	X			X		WHOI-PSU	Shank-Fisher	2:14:32	27.811360	91.537568	260		Erin subsampled for isotopes to Fisher

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3210	Astrogomphus	J2-532	GC140	22-Oct-10	Q4B	Callogorgia LII-10-500	X				X		WHOI-PSU	Shank-Fisher	2:23:25	27.811365	91.537578	260		Erin subsampled for isotopes to Fisher
3211	Zoanthids	J2-532	GC140	22-Oct-10	Biobox	Leiopathes LII-10-498	X						WHOI	Shank	5:39:37	27.810437	91.536965	250		
3212	Asteroschema sp. 2	J2-532	GC140	22-Oct-10	Q4A	Paramuricea LII-10-501	X				X		WHOI-PSU	Shank-Fisher	2:00:26	27.811412	91.537548	260		
3213	Astrogomphus	J2-532	GC140	22-Oct-10	Q4A	Paramuricea LII-10-501	X				X		WHOI-PSU	Shank-Fisher	2:00:26	27.811412	91.537548	260		
3214	Barnacle morph 4	J2-532	GC140	22-Oct-10	Q4A	Leiopathes LII-10-502	X						WHOI	Shank	1:59:52	27.811412	91.537548	261		
3215	Hydroids	J2-532	GC140	22-Oct-10	Q4A	Leiopathes LII-10-502	X						WHOI	Shank	1:59:52	27.811412	91.537548	261		
3216	stalked barnacles	J2-532	GC140	22-Oct-10	Q4A	Leiopathes LII-10-502	X						WHOI	Shank	1:59:52	27.811412	91.537548	261		
3217	Ophiuroid morph 12	J2-532	GC140	22-Oct-10	Q7B	Bushy Black LII-10-505	X		X		X		WHOI-PSU	Shank-Fisher	4:37:13	27.810544	91.536977	255	X	Erin subsampled for isotopes to Fisher
3218	Barnacle morph 1	J2-532	GC140	22-Oct-10	Q7B	Bushy Black LII-10-505	X						WHOI	Shank	4:37:13	27.810544	91.536977	255		
3220	Ophiuroid arm	J2-532	GC140	22-Oct-10	Q10B	Antipatharian LII-10-509	X				X		WHOI-PSU	Shank-Fisher	7:04:14	27.810161	91.537097	251	X	Erin subsampled for isotopes to Fisher
3221	Gorgonocephalid basketstar	J2-532	GC140	22-Oct-10	Biobox	Leiopathes LII-10-498	X		X			TS	WHOI	Shank	5:39:37	27.810437	91.536965	250	X	1 individual in cold room for 1 day and then 95% EOH
3222	Barnacle morph 4	J2-532	GC140	22-Oct-10	Q8C	Antipatharian LII-10-482	X		X			TS	WHOI	Shank	5:27:01	27.810451	91.536978	251	X	Voucher; was living on live part of black coral
4103	Sediment (0-2 cm)	J2-532	GC140	22-Oct-10	PC7							AD	USGS	Demopoulos	4:00:24	27.810785	-91.537093	264		
4104	Sediment (2-5 cm)	J2-532	GC140	22-Oct-10	PC7							AD	USGS	Demopoulos	4:00:24	27.810785	-91.537093	264		
4105	Sediment (5-7 cm)	J2-532	GC140	22-Oct-10	PC7							AD	USGS	Demopoulos	4:00:24	27.810785	-91.537093	264		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4106	Sediment (0-2 cm)	J2-532	GC140	22-Oct-10	PC10							AD	USGS	Demopoulos	3:51:40	27.810843	-91.537079	264		
4107	Sediment (2-5 cm)	J2-532	GC140	22-Oct-10	PC10							AD	USGS	Demopoulos	3:51:40	27.810843	-91.537079	264		
4108	Sediment (5-10 cm)	J2-532	GC140	22-Oct-10	PC10							AD	USGS	Demopoulos	3:51:40	27.810843	-91.537079	264		
5012	Methane12	J2-532	GC140	22-Oct-10	Niskin D							BD	FSU	McDonald	23:35:00	27.811771	-91.535979	320		
6014	rock	J2-532	GC140	22-Oct-10	rock box							DF	LSU	Roberts	4:53:22	27.810516	-91.536976	255		
5013	Methane13	J2-533	GC249	22-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
81	water	RB-10-07-006	GC852	22-Oct-10	Niskin 12								Temple	Cordes	19:15:22	27.109000	-91.172167	2		
82	water	RB-10-07-006	GC852	22-Oct-10	Niskin 11								Temple	Cordes	19:15:22	27.109000	-91.172167	2		
83	water	RB-10-07-006	GC852	22-Oct-10	Niskin 10								Temple	Cordes	19:15:22	27.109000	-91.172167	300		
84	water	RB-10-07-006	GC852	22-Oct-10	Niskin 8								Temple	Cordes	19:15:22	27.109000	-91.172167	600		
85	water	RB-10-07-006	GC852	22-Oct-10	Niskin 7								Temple	Cordes	19:15:22	27.109000	-91.172167	600		
86	water	RB-10-07-006	GC852	22-Oct-10	Niskin 6								Temple	Cordes	19:15:22	27.109000	-91.172167	900		
87	water	RB-10-07-006	GC852	22-Oct-10	Niskin 5								Temple	Cordes	19:15:22	27.109000	-91.172167	900		
88	water	RB-10-07-006	GC852	22-Oct-10	Niskin 4								Temple	Cordes	19:15:22	27.109000	-91.172167	1,200		
89	water	RB-10-07-006	GC852	22-Oct-10	Niskin 3								Temple	Cordes	19:15:22	27.109000	-91.172167	1,200		
90	water	RB-10-07-006	GC852	22-Oct-10	Niskin 2								Temple	Cordes	19:15:22	27.109000	-91.172167	1,500		
91	water	RB-10-07-006	GC852	22-Oct-10	Niskin 1								Temple	Cordes	19:15:22	27.109000	-91.172167	1,500		
92	water	J2-533	GC249	23-Oct-10	Niskin A								Temple	Cordes	5:54:51	27.715622	-90.513142	819		
93	water	J2-533	GC249	23-Oct-10	Niskin B								Temple	Cordes	6:16:26	27.717745	-90.512414	810		
94	water	J2-533	GC249	23-Oct-10	Niskin C								Temple	Cordes	7:03:45	27.723820	-90.513653	788		
95	water	J2-533	GC249	23-Oct-10	Niskin D								Temple	Cordes	8:26:54	27.725744	-90.515136	801		
96	water	J2-533	GC249	23-Oct-10	Niskin E								Temple	Cordes	9:38:37	27.728871	-90.516838	809		
97	water	J2-533	GC249	23-Oct-10	Niskin F								Temple	Cordes	11:36:08	27.739320	-90.519545	782		
98	water	J2-533	GC249	23-Oct-10	Niskin G								Temple	Cordes	12:31:20	27.737741	-90.521707	783		
512	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q3		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:23:24	27.724137	-90.514181	790	X	on tubeworm

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
513	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q3		X	X	X			AQ	Temple	Cordes	7:23:24	27.724137	-90.514181	790	X	on clam shell
514	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q3		X	X	X			AQ	Temple	Cordes	7:23:24	27.724137	-90.514181	790	X	on clam shell
515	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q8B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	11:23:37	27.738258	-90.519322	778	X	catshark eggcase
516	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q4B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:59:39	27.724020	-90.514188	789	X	peach color; dense polyps
517	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q4A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:50:17	27.724060	-90.514181	790		
518	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q8A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:55:51	27.724044	-90.514182	790		
519	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q5B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	8:04:40	27.723998	-90.514195	789		
520	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q1B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:20:44	27.724140	-90.514187	790		
521	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q5A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:43:38	27.724071	-90.514201	790		
522	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q1A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:19:03	27.724140	-90.514191	790		
523	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q2B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:41:06	27.724078	-90.514200	790		with skeleton for SI
524	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q2A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:19:03	27.724140	-90.514191	790		
525	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q6B		X	X	X		X		Temple-PSU	Cordes-Fisher	8:07:49	27.723982	-90.514198	789		
526	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q6A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:53:05	27.724050	-90.514181	790		
527	Callogorgia sp.	J2-533	GC249	23-Oct-10	Q9		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	12:29:18	27.737740	-90.521707	785	X	peach color; dense polyps
1056	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1057	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1058	S. jonesl ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1059	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1060	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1061	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1062	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1063	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1064	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1065	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
1066	L. luymesi ?	J2-533	GC249	23-Oct-10	Q13		X				X		PSU	Fisher	9:09:40	27.728842	-90.516873	812		the tubes look like Lamellibrachia but the worms look like escarpids
3223	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q3	Callogorgia LII-10-512	X	X			X		WHOI-PSU	Shank-Fisher	7:23:24	27.724137	-90.514181	790	X	Erin subsampled for isotopes to Fisher
3224	Tubeworm	J2-533	GC249	23-Oct-10	Blender A			X					WHOI	Shank	9:24:13	27.728854	-90.516851	812		broke up out of tube; soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate
3225	mussel	J2-533	GC249	23-Oct-10	Blender A			X					WHOI	Shank	9:24:13	27.728854	-90.516851	812		soak in RNALater and store at 4C O/N then freeze at -80C with plume and trophosome separate
3226	mussel	J2-533	GC249	23-Oct-10	Blender A			X					WHOI	Shank	9:24:13	27.728854	-90.516851	812		
3227	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q3	Callogorgia LII-10-512, 513, or 514	X						WHOI	Shank	7:23:24	27.724137	-90.514181	790		juvenile
3228	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q8B	Callogorgia LII-10-515	X				X		WHOI-PSU	Shank-Fisher	11:23:37	27.738258	-90.519322	778		
3229	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q4A	Callogorgia LII-10-517	X	X			X		WHOI-PSU	Shank-Fisher	7:50:17	27.724060	-90.514181	790		Erin subsampled for isotopes to Fisher

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3230	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q4B	Callogorgia LII-10-516	X	X			X		WHOI-PSU	Shank-Fisher	7:59:39	27.724020	-90.514188	789	X	Erin subsampled for isotopes to Fisher
3231	Brachyuran crab	J2-533	GC249	23-Oct-10	Biobox		X					NRDA	WHOI-NRDA	Shank	7:47:15	27.724063	-90.514192	790		subsample leg and rest to NRDA: GU2790-A1023-T-E9-01
3232	Barnacle morph 3	J2-533	GC249	23-Oct-10	Biobox	brachyuran crab TS3231	X						WHOI	Shank	7:47:15	27.724063	-90.514192	790		5 went to AD and 2 tubes of 20 plus 141
3233	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q8A	Callogorgia LII-10-518	X				X		WHOI-PSU	Shank-Fisher	7:55:51	27.724044	-90.514182	790		Erin subsampled for isotopes to Fisher
3234	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q5B	Callogorgia LII-10-519	X				X		WHOI-PSU	Shank-Fisher	8:04:40	27.723998	-90.514195	789		Erin subsampled for isotopes to Fisher
3235	Turrid gastropod	J2-533	GC249	23-Oct-10	Q8A	Callogorgia LII-10-518	X						WHOI	Shank	7:55:51	27.724044	-90.514182	790		
3236	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q1B	Callogorgia LII-10-520	X				X		WHOI-PSU	Shank-Fisher	7:20:44	27.724140	-90.514187	790		Erin subsampled for isotopes to Fisher
3237	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q5A	Callogorgia LII-10-521	X				X		WHOI-PSU	Shank-Fisher	7:43:38	27.724071	-90.514201	790		Erin subsampled for isotopes to Fisher
3238	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q1A	Callogorgia LII-10-522	X				X		WHOI-PSU	Shank-Fisher	7:19:03	27.724140	-90.514191	790		Erin subsampled for isotopes to Fisher
3239	Anemone morph 2	J2-533	GC249	23-Oct-10	Q2B	shell	X						WHOI	Shank	7:41:06	27.724078	-90.514200	790		
3240	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q2A	Callogorgia LII-10-524	X				X		WHOI-PSU	Shank-Fisher	7:19:03	27.724140	-90.514191	790		Erin subsampled for isotopes to Fisher

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3241	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q2B	Callogorgia LII-10-523	X				X		WHOI-PSU	Shank-Fisher	7:41:06	27.724078	-90.514200	790		
3242	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q6B	Callogorgia LII-10-525	X				X		WHOI-PSU	Shank-Fisher	8:07:49	27.723982	-90.514198	789		
3243	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q6A	Callogorgia LII-10-526	X				X		WHOI-PSU	Shank-Fisher	7:53:05	27.724050	-90.514181	790		
3244	Asteroschema sp.1	J2-533	GC249	23-Oct-10	Q9		X				X		WHOI-PSU	Shank-Fisher	12:29:18	27.737740	-90.521707	785	X	Erin subsampled for isotopes to Fisher
3245	dorvellid worm	J2-533	GC249	23-Oct-10	Biobox	Brachyuran crab TS3231			X			TS	WHOI-PSU	Shank-Fisher	7:47:15	27.724063	-90.514192	790	X	Voucher
3246	Turrid gastropod	J2-533	GC249	23-Oct-10	Q6A	Callogorgia LII-10-526	X						WHOI-PSU	Shank-Fisher	7:53:05	27.724050	-90.514181	790		
3247	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3248	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3249	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3250	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3251	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3252	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3253	B. childressi	J2-533	GC249	23-Oct-10	Q13		X	X			X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		mussel; subsample of adductor and gill frozen and also soaked in RNALater O/N then frozen at -80C
3254	Lamellabranchia lumesi?	J2-533	GC249	23-Oct-10	Q13		X				X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		tubeworm; subsample of vestimentum and trophosome frozen at -80C
3255	Lamellabranchia lumesi?	J2-533	GC249	23-Oct-10	Q13		X				X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		tubeworm; subsample of vestimentum and trophosome frozen at -80C

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3256	Lamellabranchia lumesi?	J2-533	GC249	23-Oct-10	Q13		X				X		WHOI-PSU	Shank-Fisher	9:09:40	27.728842	-90.516873	812		tubeworm; subsample of vestimentum and trophosome frozen at -80C
4109	Sediment (0-2 cm)	J2-533	GC249	23-Oct-10	PC9							AD	USGS	Demopoulos	7:31:02	27.724077	-90.514170	790		
4110	Sediment (2-5 cm)	J2-533	GC249	23-Oct-10	PC9							AD	USGS	Demopoulos	7:31:02	27.724077	-90.514170	790		
4111	Sediment (5-10 cm)	J2-533	GC249	23-Oct-10	PC9							AD	USGS	Demopoulos	7:31:02	27.724077	-90.514170	790		
4113	Sediment (0-5 cm)	J2-533	GC249	23-Oct-10	PC10							NRDA	USGS-NRDA	Demopoulos	6:12:07	27.717371	-90.512660	811		
4114	Sediment (0-2 cm)	J2-533	GC249	23-Oct-10	PC7							AD	USGS	Demopoulos	7:38:02	27.724082	-90.514193	790		
4115	Sediment (2-5 cm)	J2-533	GC249	23-Oct-10	PC7							AD	USGS	Demopoulos	7:38:02	27.724082	-90.514193	790		
4116	Sediment (5-10 cm)	J2-533	GC249	23-Oct-10	PC7							AD	USGS	Demopoulos	7:38:02	27.724082	-90.514193	790		
4117	Sediment (0-5 cm)	J2-533	GC249	23-Oct-10	PC1							NRDA	USGS-NRDA	Demopoulos	8:11:40	27.724092	-90.514109	790		
4118	Sediment	J2-533	GC249	23-Oct-10	PC8							AD	USGS	Demopoulos	7:35:23	27.724085	-90.514189	790		
4119	Sediment	J2-533	GC249	23-Oct-10	PC8							AD	USGS	Demopoulos	7:35:23	27.724085	-90.514189	790		
4120	Sediment	J2-533	GC249	23-Oct-10	PC8							AD	USGS	Demopoulos	7:35:23	27.724085	-90.514189	790		
5014	Methane14	J2-533	GC249	23-Oct-10	Niskin F							BD	FSU	McDonald	11:36:08	27.739320	-90.519545	782		
103	water	J2-534	VK906	24-Oct-10	Niskin E								Temple	Cordes	17:34:32	29.068083	-88.378473	441		
528	Leiopathes	J2-534	VK906	24-Oct-10	Q11A		X	X	X		X	DR	PSU	Baums-Fisher	23:10:36	29.068704	-88.377462	403	X	white
530	Leiopathes	J2-534	VK906	24-Oct-10	Q7B		X	X	X			DR	PSU	Baums-Fisher	20:32:37	29.068858	-88.377621	403	X	
531	Leiopathes	J2-534	VK906	24-Oct-10	Q7B		X	X	X		X	DR	PSU	Baums-Fisher	20:32:37	29.068858	-88.377621	403	X	red
532	Leiopathes	J2-534	VK906	24-Oct-10	Q7A		X	X	X			DR	PSU	Baums-Fisher	20:18:23	29.068858	-88.377621	403	X	white
533	Leiopathes	J2-534	VK906	24-Oct-10	Q7A		X	X	X		X	DR	PSU	Baums-Fisher	20:18:23	29.068858	-88.377621	403	X	red
534	Leiopathes	J2-534	VK906	24-Oct-10	Q12B		X	X	X		X	DR	PSU	Baums-Fisher	22:53:20	29.068723	-88.377493	403	X	red
535	Leiopathes	J2-534	VK906	24-Oct-10	Q12A		X	X	X			DR	PSU	Baums-Fisher	22:48:18	29.068723	-88.377493	403		red

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
536	Leiopathes	J2-534	VK906	24-Oct-10	Q8B		X	X	X			DR	PSU	Baums-Fisher	19:13:59	29.068896	-88.377679	400	X	label in photo says 537; red
537	Leiopathes	J2-534	VK906	24-Oct-10	Q8B		X	X	X			DR	PSU	Baums-Fisher	19:13:59	29.068896	-88.377679	400	X	label in photo says 536; white
538	Leiopathes	J2-534	VK906	24-Oct-10	Q9B		X	X	X		X	DR	PSU	Baums-Fisher	22:25:33	29.068730	-88.377476	402		red
539	Leiopathes	J2-534	VK906	24-Oct-10	Q8A		X	X	X			DR	PSU	Baums-Fisher	18:32or18:52	29.068935	-88.377724	400	X	white
540	Leiopathes	J2-534	VK906	24-Oct-10	Q8A		X	X	X			DR	PSU	Baums-Fisher	18:38:53	29.068935	-88.377724	400	X	???; red
541	Leiopathes	J2-534	VK906	24-Oct-10	Q8A		X	X	X			DR	PSU	Baums-Fisher	18:32or18:52	29.068935	-88.377724	400	X	white
542	Leiopathes	J2-534	VK906	24-Oct-10	Q9A		X	X	X			DR	PSU	Baums-Fisher	20:43:02	29.068903	-88.377581	402	X	red
543	Leiopathes	J2-534	VK906	24-Oct-10	Q9A		X	X	X			DR	PSU	Baums-Fisher	20:43:02	29.068903	-88.377581	402	X	white
544	Leiopathes	J2-534	VK906	24-Oct-10	Q6B		X	X	X			DR	PSU	Baums-Fisher	22:01:57	29.068816	-88.377435	400	X	white
545	Leiopathes	J2-534	VK906	24-Oct-10	Q6B		X	X	X			DR	PSU	Baums-Fisher	22:01:57	29.068816	-88.377435	400	X	red
546	Leiopathes	J2-534	VK906	24-Oct-10	Q6A		X	X	X			DR	PSU	Baums	19:29:10	29.068866	-88.377606	399	X	white
547	Leiopathes	J2-534	VK906	24-Oct-10	Q6A		X	X	X			DR	PSU	Baums	19:37:26	29.068866	-88.377606	399	X	red
548	Leiopathes	J2-534	VK906	24-Oct-10	Q4B		X	X	X			DR	PSU	Baums	18:07:40	29.068936	-88.377733	401		white; check voucher
549	Leiopathes	J2-534	VK906	24-Oct-10	Q4B		X	X	X		X	DR	PSU	Baums-Fisher	18:04:14	29.068936	-88.377733	401		red
550	Leiopathes	J2-534	VK906	24-Oct-10	Q4B		X	X	X			DR	PSU	Baums	18:28:15	29.068949	-88.377736	401		pink
551	Leiopathes	J2-534	VK906	24-Oct-10	Q4A		X	X	X			DR	PSU	Baums	11:32:32	29.068465	-88.377704	407	X	white
552	Leiopathes	J2-534	VK906	24-Oct-10	Q4A		X	X	X			DR	PSU	Baums	17:52:03	29.068934	-88.377774	402	X	red
554	Leiopathes	J2-534	VK906	24-Oct-10	Q5B		X	X	X		X	DR	PSU	Baums-Fisher	11:03:13	29.068475	-88.377802	409	X	white
555	Leiopathes	J2-534	VK906	24-Oct-10	Q5B		X	X	X			DR	PSU	Baums	11:10:03	29.068475	-88.377802	409	X	red
556	Leiopathes	J2-534	VK906	24-Oct-10	Q5A		X	X	X			DR	PSU	Baums	10:14:27	29.068608	-88.377921	411	X	red
557	Leiopathes	J2-534	VK906	24-Oct-10	Q1B		X	X	X		X	DR	PSU	Baums-Fisher	9:47:36	29.068653	-88.377610	403		white (pink on surface)
558	Leiopathes	J2-534	VK906	24-Oct-10	Q1A		X	X	X		X	DR	PSU	Baums-Fisher	5:38:58	29.069588	-88.377016	391		white

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
559	Leiopathes	J2-534	VK906	24-Oct-10	Q2B		X	X	X			DR	PSU	Baums	9:51:18	29.068653	-88.377610	403		red
560	Leiopathes	J2-534	VK906	24-Oct-10	Q2A		X	X	X			DR	PSU	Baums	7:34:38	29.069323	-88.377195	393		white
561	white octocoral	J2-534	VK906	24-Oct-10	Q2A		X	X	X			AQ	Temple	Cordes	6:51:05	29.069494	-88.376542	398	X	
562	Leiopathes	J2-534	VK906	24-Oct-10	Q3B		X	X	X		X	DR	PSU	Baums-Fisher	21:35:44	29.068908	-88.377564	401		white
563	Leiopathes	J2-534	VK906	24-Oct-10	Q3B		X	X	X			DR	PSU	Baums	21:33:23	29.068908	-88.377563	401		red
564	Leiopathes	J2-534	VK906	24-Oct-10	Q3A		X	X	X			DR	PSU	Baums	10:31:48	29.068530	-88.377852	410		red
565	Acanthogorgia	J2-534	VK906	24-Oct-10	Q3A		X	X	X			AQ	Temple	Cordes	10:31:48	29.068530	-88.377852	410		verify with the pictures; not logged
566	Solitary white octocoral	J2-534	VK906	24-Oct-10	Q3A		X					AQ	Temple	Cordes	10:31:48	29.068530	-88.377852	410		verify with the pictures; not logged
567	Leiopathes	J2-534	VK906	24-Oct-10	Blue Chamber		X	X	X			DR	PSU	Baums	5:29:55	29.069587	-88.377016	391		white; voucher in RNA later
2067	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q14			X	X	X		CM	USGS	Morrison	8:14:57	29.069243	-88.377546	393		
2068	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q11A			X	X	X		CM	USGS	Morrison	23:11:26	29.068704	-88.377462	403		
2069	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q11B			X	X	X		CM	USGS	Morrison	23:56:39	29.069725	-88.377587	401		
2070	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q7A			X	X	X		CM	USGS	Morrison	20:24:12	29.068858	-88.377621	403		
2071	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q8B			X	X	X		CM	USGS	Morrison	19:10:05	29.068904	-88.377687	400		
2072	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q3A			X	X	X		CM	USGS	Morrison	10:31:48	29.068530	-88.377852	410		
2073	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q9B			X	X	X		CM	USGS	Morrison	22:28:38	29.068730	-88.377475	402		
2074	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q9A			X	X	X		CM	USGS	Morrison	20:52:10	29.068903	-88.377581	402		
2075	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q6A			X	X	X		CM	USGS	Morrison	19:31:12	29.068866	-88.377606	399		
2076	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q4B			X	X	X		CM	USGS	Morrison	18:18:33	29.068936	-88.377733	401		
2077	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q4A			X	X	X		CM	USGS	Morrison	8:14:57	29.069243	-88.377546	393		
2078	Eumunida picta	J2-534	VK906	24-Oct-10	Q15B				X			None-legonly	USGS	Morrison	9:18:20	29.069127	-88.377601	395		
2079	Eumunida picta	J2-534	VK906	24-Oct-10	Q13				X			None-legonly	USGS	Morrison	5:49:31	29.069593	-88.377019	391		
2080	Lophelia pertusa	J2-534	VK906	24-Oct-10	Blender A			X				CM-RNAL	USGS	Morrison	8:41:18	29.069142	-88.377569	395		
2082	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q1A			X	X	X		CM	USGS	Morrison	5:41:45	29.069589	-88.377020	391		
2083	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q2A			X	X	X		CM	USGS	Morrison	7:32:24	29.069318	-88.377185	393		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2084	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q3B			X	X	X		CM	USGS	Morrison	21:34:16	29.068908	-88.377563	401		
2085	Eunicid	J2-534	VK906	24-Oct-10	Q3A	Lophelia LII-10-2086		X	X			CM-MN	USGS	Morrison	10:31:48	29.068530	-88.377852	410		
2086	Lophelia pertusa	J2-534	VK906	24-Oct-10	Q3A			X	X	X		CM	USGS	Morrison	10:31:48	29.068530	-88.377852	410		
2087	Lophelia pertusa	J2-534	VK906	24-Oct-10	Blue Chamber			X				CM-RNAL	USGS	Morrison	5:26:46	29.069609	-88.377037	390		
2088	Echinus tylodes	J2-534	VK906	24-Oct-10	Q13				X			NRDA	WHOI-NRDA	Shank	5:51:32	29.069593	-88.377018	391	X	
2089	Echinus tylodes	J2-534	VK906	24-Oct-10	Q15				X			NRDA	WHOI-NRDA	Shank	9:21:55	29.069127	-88.377601	395		
2090	Echinus tylodes	J2-534	VK906	24-Oct-10	Q14				X			NRDA	WHOI-NRDA	Shank	8:14:57	29.069243	-88.377546	393		
3258	Gastropod morph 2	J2-534	VK906	24-Oct-10	Q11B	Lophelia ? LII-10-2069	X						WHOI	Shank	23:56:39	29.069725	-88.377587	401		
3259	white sponge	J2-534	VK906	24-Oct-10	Q11A	Lophelia ? LII-10-2068	X						WHOI	Shank	23:11:26	29.068704	-88.377462	403		
3260	Gastropod morph 2	J2-534	VK906	24-Oct-10	Q7A	Lophelia LII-10-2070	X						WHOI	Shank	20:24:12	29.068858	-88.377621	403		
3261	Anemone morph 4	J2-534	VK906	24-Oct-10	Q12B	dead Lophelia	X						WHOI	Shank	22:56:00	29.068723	-88.377493	403		
3262	Hydroids and anemone morph 4	J2-534	VK906	24-Oct-10	Q7A	Lophelia LII-10-2070	X						WHOI	Shank	20:24:12	29.068858	-88.377621	403		Hydroids; 2 anemone morph 4 on Lophelia - froze the whole fragment together
3263	White sponge	J2-534	VK906	24-Oct-10	Q8B	Lophelia LII-10-2071	X						WHOI	Shank	19:10:05	29.068904	-88.377687	400		
3264	Anemone morph 4	J2-534	VK906	24-Oct-10	Q3A	dead part of Lophelia LII-10-2072	X						WHOI	Shank	10:31:48	29.068530	-88.377852	410		
3265	Anemone morph 4	J2-534	VK906	24-Oct-10	Q3A	Red Leiopathes LII-10-564	X						WHOI	Shank	10:31:48	29.068530	-88.377852	410		
3266	Anemone morph 4	J2-534	VK906	24-Oct-10	Q9A	Lophelia LII-10-2074	X						WHOI	Shank	20:52:10	29.068903	-88.377581	402		

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3277	Gastropod morph 2	J2-534	VK906	24-Oct-10	Q9A	Lophelia LII-10-2074	X						WHOI	Shank	20:52:10	29.068903	-88.377581	402		
3278	Gastropod morph 2	J2-534	VK906	24-Oct-10	Q9A	Lophelia LII-10-2074	X						WHOI	Shank	20:52:10	29.068903	-88.377581	402		
3279	stalked sponges	J2-534	VK906	24-Oct-10	Q4A	Lophelia LII-10-2077	X						WHOI	Shank	8:14:57	29.069243	-88.377546	393		
3280	white sponge	J2-534	VK906	24-Oct-10	Q4A	Lophelia LII-10-2077	X						WHOI	Shank	8:14:57	29.069243	-88.377546	393		
3281	Eumunida picta	J2-534	VK906	24-Oct-10	Q15B	LII-10-2078	X						WHOI	Shank	9:18:20	29.069127	-88.377601	395		only bits of arm subsampled to CM and Shank
3282	Eumunida picta	J2-534	VK906	24-Oct-10	Q13	LII-10-2079	X						WHOI	Shank	5:51:32	29.069593	-88.377018	391		only bits of arm subsampled to CM and Shank
3283	Sponge	J2-534	VK906	24-Oct-10	Biobox Port	Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3284	stalked sponges	J2-534	VK906	24-Oct-10	Biobox Port	Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3285	Anemone morph 4	J2-534	VK906	24-Oct-10	Biobox Port	Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3286	Ophiuroid morph 12	J2-534	VK906	24-Oct-10	Biobox Port	Sponge off Lophelia	X		X			TS	WHOI	Shank	XX:XX	29.069000	-88.377000	400	X	
3287	Astrogomphus	J2-534	VK906	24-Oct-10	Q2A	Muriceides LII-10-561	X						WHOI	Shank	6:51:05	29.069494	-88.376542	398		
3288	Crinoid	J2-534	VK906	24-Oct-10	Biobox port	Lophelia	X		X			TS	WHOI	Shank	XX:XX	29.069000	-88.377000	400	X	
3289	Polynoid	J2-534	VK906	24-Oct-10	Biobox Port	Sponge off Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		parts of worm
3290	mixed polychaetes	J2-534	VK906	24-Oct-10	Biobox Port	Sponge off Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3291	Lophelia pertusa	J2-534	VK906	24-Oct-10	Biobox Port		X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3292	Shrimp morph 5?	J2-534	VK906	24-Oct-10	Q2A	Lophelia LII-10-2083	X						WHOI	Shank	7:32:24	29.069318	-88.377185	393		
3293	stalked sponges	J2-534	VK906	24-Oct-10	Q3A	Lophelia LII-10-2086	X						WHOI	Shank	10:31:48	29.068530	-88.377852	410		
3294	Anemone morph 4	J2-534	VK906	24-Oct-10	Q3A	Lophelia LII-10-2086	X						WHOI	Shank	10:31:48	29.068530	-88.377852	410		

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3295	Terebellid worm	J2-534	VK906	24-Oct-10	Biobox Port	Sponge off Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3296	Echinus tylodes	J2-534	VK906	24-Oct-10	Q13		X					NRDA	WHOI-NRDA	Shank	5:49:31	29.069593	-88.377019	391	X	subsample to CM; to Shank; to NRDA GU2988-A1025-T-E9-01
3298	Crinoid	J2-534	VK906	24-Oct-10	Biobox port	Lophelia	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		
3299	Venus flytrap anemone	J2-534	VK906	24-Oct-10	Q13		X					NRDA	WHOI-NRDA	Shank	5:54:34	29.069611	-88.377049	390		subsample to Shank; to NRDA GU2988-A1025-T-E9-02
3300	Venus flytrap anemone	J2-534	VK906	24-Oct-10	Q14		X					NRDA	WHOI-NRDA	Shank	8:06:35	29.069242	-88.377546	393		subsample to Shank; to NRDA GU2988-A1025-T-E9-03
3301	Echinus tylodes	J2-534	VK906	24-Oct-10	Q14		X					NRDA	WHOI-NRDA	Shank	8:08:25	29.069242	-88.377546	393		subsample to Shank; to NRDA GU2988-A1025-T-E9-04
3302	Anemone	J2-534	VK906	24-Oct-10	Q15		X						WHOI	Shank	9:05:46	29.069134	-88.377579	394		subsample to Shank; to NRDA GU2988-A1025-T-E9-05
3303	Echinus tylodes	J2-534	VK906	24-Oct-10	Q15		X						WHOI	Shank	9:21:55	29.069127	-88.377601	395		subsample to Shank; to NRDA GU2988-A1025-T-E9-06
4121	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC6							AD	USGS	Demopoulos	5:00:34	29.069649	-88.377021	390		
4122	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC6							AD	USGS	Demopoulos	5:00:34	29.069649	-88.377021	390		
4123	Sediment (5-8 cm)	J2-534	VK906	24-Oct-10	PC6							AD	USGS	Demopoulos	5:00:34	29.069649	-88.377021	390		
4124	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC7							AD	USGS	Demopoulos	5:02:13	29.069649	-88.377021	390		
4125	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC7							AD	USGS	Demopoulos	5:02:13	29.069649	-88.377021	390		

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4126	Sediment (5-9 cm)	J2-534	VK906	24-Oct-10	PC7							AD	USGS	Demopoulos	5:02:13	29.069649	-88.377021	390		
4127	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC8							AD	USGS	Demopoulos	5:04:50	29.069649	-88.377021	390		
4128	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC8							AD	USGS	Demopoulos	5:04:50	29.069649	-88.377021	390		
4129	Sediment (5-6 cm)	J2-534	VK906	24-Oct-10	PC8							AD	USGS	Demopoulos	5:04:50	29.069649	-88.377021	390		
4130	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC9							AD	USGS	Demopoulos	4:17:56	29.069294	-88.377505	395		
4131	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC9							AD	USGS	Demopoulos	4:17:56	29.069294	-88.377505	395		
4132	Sediment (5-9 cm)	J2-534	VK906	24-Oct-10	PC9							AD	USGS	Demopoulos	4:17:56	29.069294	-88.377505	395		
4133	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC10							AD	USGS	Demopoulos	3:35:13	29.069298	-88.377495	394		
4134	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC10							AD	USGS	Demopoulos	3:35:13	29.069298	-88.377495	394		
4135	Sediment (5-6 cm)	J2-534	VK906	24-Oct-10	PC10							AD	USGS	Demopoulos	3:35:13	29.069298	-88.377495	394		
4136	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC2							AD	USGS	Demopoulos	3:59:22	29.069293	-88.377505	395		
4137	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC2							AD	USGS	Demopoulos	3:59:22	29.069293	-88.377505	395		
4138	Sediment (5-6 cm)	J2-534	VK906	24-Oct-10	PC2							AD	USGS	Demopoulos	3:59:22	29.069293	-88.377505	395		
4139	Sediment (0-2 cm)	J2-534	VK906	24-Oct-10	PC3							AD	USGS	Demopoulos	4:04:10	29.069293	-88.377505	395		
4140	Sediment (2-5 cm)	J2-534	VK906	24-Oct-10	PC3							AD	USGS	Demopoulos	4:04:10	29.069293	-88.377505	395		
4141	Sediment (0-5 cm)	J2-534	VK906	24-Oct-10	PC4							AD	USGS	Demopoulos	4:52:50	29.069665	-88.377042	390		
4142	Sediment (0-5 cm)	J2-534	VK906	24-Oct-10	PC5							NRDA	USGS-NRDA	Demopoulos	4:56:56	29.069664	-88.377041	390		
4143	Sediment (0-5 cm)	J2-534	VK906	24-Oct-10	PC1							NRDA	USGS-NRDA	Demopoulos	3:47:59	29.069293	-88.377505	521		
99	water	J2-534	VK906	25-Oct-10	Niskin A								Temple	Cordes	3:13:51	29.069294	-88.377739	393		
100	water	J2-534	VK906	25-Oct-10	Niskin B								Temple	Cordes	3:22:55	29.069367	-88.377682	395		
101	water	J2-534	VK906	25-Oct-10	Niskin C								Temple	Cordes	6:05:26	29.069609	-88.377020	388		
102	water	J2-534	VK906	25-Oct-10	Niskin D								Temple	Cordes	9:31:11	29.069139	-88.377560	391		
104	water	J2-534	VK906	25-Oct-10	Niskin F								Temple	Cordes	23:39:16	29.069721	-88.377585	398		
105	water	J2-534	VK906	25-Oct-10	Niskin G								Temple	Cordes	8:21:14	29.072686	-88.378822	422		
529	Paramuriceid	J2-534	VK906	25-Oct-10	Q11B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:55:16	29.068937	-88.381952	432	X	with ophiuroid; white
553	Paramuricea A	J2-534	VK906	25-Oct-10	Biobox Port		X	X	X			AQ	Temple	Cordes	5:48:27	29.085819	-88.388253	369	X	
2068	Lophelia pertusa	J2-534	VK906	25-Oct-10	Q11A	LII-10-2068		X				JL	Temple	Cordes	23:11:26	29.068704	-88.377462	403		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2069	Lophelia pertusa	J2-534	VK906	25-Oct-10	Q11B	LII-10-2069		X				JL	Temple	Cordes	23:56:39	29.069725	-88.377587	401		
2070	Lophelia pertusa	J2-534	VK906	25-Oct-10	Q7A	LII-10-2070		X				JL	Temple	Cordes	20:24:12	29.068858	-88.377621	403		
2071	Lophelia pertusa	J2-534	VK906	25-Oct-10	Q8B	LII-10-2071		X				JL	Temple	Cordes	19:10:05	29.068904	-88.377687	400		
2080	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blender	LII-10-2080		X				JL	Temple	Cordes	8:41:18	29.069142	-88.377569	395		
2080	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blender	LII-10-2080		X				JL	Temple	Cordes	8:41:18	29.069142	-88.377569	395		
2080	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blender	LII-10-2080		X				JL	Temple	Cordes	8:41:18	29.069142	-88.377569	395		
2081	Munidopsis	J2-534	VK906	25-Oct-10	Biobox Port				X			CM-MN	USGS	Morrison	NA	29.069000	-88.377000	400		
2087	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blue Chamber	LII-10-2087		X				JL	Temple	Cordes	5:26:46	29.069609	-88.377037	390		
2087	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blue Chamber	LII-10-2087		X				JL	Temple	Cordes	5:26:46	29.069609	-88.377037	390		
2087	Lophelia pertusa	J2-534	VK906	25-Oct-10	Blue Chamber	LII-10-2087		X				JL	Temple	Cordes	5:26:46	29.069609	-88.377037	390		
3257	Astrogomphus	J2-534	VK906	25-Oct-10	Q11B	Paramuricidea LII-10-529	X						WHOI	Shank	0:55:16	29.068937	-88.381952	432	X	Erin subsampled for isotopes for Fisher
3297	Asteroschema sp. 1	J2-534	VK906	25-Oct-10	Biobox Port	Paramuricea multispina LII-10-553	X						WHOI	Shank	XX:XX	29.069000	-88.377000	400		just arms
5015	Methane15	J2-534	VK906	25-Oct-10	Niskin F							BD	FSU	McDonald	23:39:16	29.069721	-88.377585	398		
5016	Methane16	J2-534	VK906	25-Oct-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
5025	Coral-Live/Dead	J2-534	VK906	25-Oct-10	Q3A							BD	FSU	McDonald	NA	NA	NA	NA		
5026	Coral-Live/Dead	J2-534	VK906	25-Oct-10	Q12A							BD	FSU	McDonald	NA	NA	NA	NA		
5027	Coral-Live/Dead	J2-534	VK906	25-Oct-10	Q12B							BD	FSU	McDonald	NA	NA	NA	NA		
5028	Coral-Live/Dead	J2-534	VK906	25-Oct-10	Q11A							BD	FSU	McDonald	NA	NA	NA	NA		
5034	water-DIC	J2-534	VK906	25-Oct-10								BD	FSU	McDonald	NA	NA	NA	NA		
4147	Sediment (0-2 cm)	J2-535	VK906	25-Oct-10	PC3							AD	USGS	Demopoulos	23:56:28	29.068996	-88.376952	394		
4148	Sediment (2-5 cm)	J2-535	VK906	25-Oct-10	PC3							AD	USGS	Demopoulos	23:56:28	29.068996	-88.376952	394		
4149	Sediment (5-6 cm)	J2-535	VK906	25-Oct-10	PC3							AD	USGS	Demopoulos	23:56:28	29.068996	-88.376952	394		
4162	Sediment (0-2 cm)	J2-535	VK906	25-Oct-10	PC9							AD	USGS	Demopoulos	1:12:04	29.069597	-88.376431	399		
4163	Sediment (2-5 cm)	J2-535	VK906	25-Oct-10	PC9							AD	USGS	Demopoulos	1:12:04	29.069597	-88.376431	399		
4164	Sediment (5-10 cm)	J2-535	VK906	25-Oct-10	PC9							AD	USGS	Demopoulos	1:12:04	29.069597	-88.376431	399		

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106	water	RB-10-07_007	VK906	25-Oct-10	Niskin 12								Temple	Cordes	17:40:57	29.068667	-88.381000	4		
107	water	RB-10-07_007	VK906	25-Oct-10	Niskin 11								Temple	Cordes	17:40:57	29.068667	-88.381000	4		
108	water	RB-10-07_007	VK906	25-Oct-10	Niskin 10								Temple	Cordes	17:40:57	29.068667	-88.381000	101		
109	water	RB-10-07_007	VK906	25-Oct-10	Niskin 9								Temple	Cordes	17:40:57	29.068667	-88.381000	101		
110	water	RB-10-07_007	VK906	25-Oct-10	Niskin 8								Temple	Cordes	17:40:57	29.068667	-88.381000	200		
111	water	RB-10-07_007	VK906	25-Oct-10	Niskin 7								Temple	Cordes	17:40:57	29.068667	-88.381000	200		
112	water	RB-10-07_007	VK906	25-Oct-10	Niskin 6								Temple	Cordes	17:40:57	29.068667	-88.381000	301		
113	water	RB-10-07_007	VK906	25-Oct-10	Niskin 5								Temple	Cordes	17:40:57	29.068667	-88.381000	301		
114	water	RB-10-07_007	VK906	25-Oct-10	Niskin 4								Temple	Cordes	17:40:57	29.068667	-88.381000	350		
115	water	RB-10-07_007	VK906	25-Oct-10	Niskin 3								Temple	Cordes	17:40:57	29.068667	-88.381000	350		
116	water	RB-10-07_007	VK906	25-Oct-10	Niskin 2								Temple	Cordes	17:40:57	29.068667	-88.381000	421		
117	water	RB-10-07_007	VK906	25-Oct-10	Niskin 1								Temple	Cordes	17:40:57	29.068667	-88.381000	421		
5030	Coral-Live/Dead	J2-531	GB535	26-Oct-10	Biobox							BD	FSU	McDonald	NA	NA	NA	NA		
118	water	J2-535	VK906	26-Oct-10	Niskin A								Temple	Cordes	23:13:25	29.068971	-88.377018	392		
119	water	J2-535	VK906	26-Oct-10	Niskin B								Temple	Cordes	23:50:40	29.069164	-88.376966	391		
120	water	J2-535	VK906	26-Oct-10	Niskin C								Temple	Cordes	0:41:34	29.069055	-88.376927	391		
121	water	J2-535	VK906	26-Oct-10	Niskin D								Temple	Cordes	NA	NA	NA	NA		
122	water	J2-535	VK906	26-Oct-10	Niskin E								Temple	Cordes	1:24:57	29.069598	-88.376432	397		
123	water	J2-535	VK862	26-Oct-10	Niskin G								Temple	Cordes	10:24:08	29.106736	-88.384263	307		
568	Paramuricea multispina	J2-535	VK906	26-Oct-10	Q1A		X	X	X			AQ	Temple	Cordes	8:29:00	29.109069	-88.387399	354	X	
569	Isididae	J2-535	VK906	26-Oct-10	on carbonate	on carbonate rock	X		X			AQ	Temple	Cordes	NA	NA	NA	NA		on one of Dong's carbonates
570	Leiopathes	J2-535	VK906	26-Oct-10	Blender A		X	X	X			DR (inRNALater)	PSU	Baums	0:25:00	29.069057	-88.376927	394		white
571	Callogorgia sp.	J2-535	VK862	26-Oct-10	Blue Chamber		X	X			X	AQ	Temple-PSU	Cordes-Fisher	8:45:00	29.109011	-88.387293	352		dead polyps; Stable Isotopes

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572	Callogorgia sp.	J2-535	VK862	26-Oct-10	Blue Chamber		X	X			X	AQ	Temple-PSU	Cordes-Fisher	8:45:00	29.109011	-88.387293	352		dead polyps; Stable Isotopes
573	Callogorgia sp.	J2-535	VK862	26-Oct-10	Red Chamber		X	X			X	AQ	Temple-PSU	Cordes-Fisher	7:48:00	29.109078	-88.387570	357		dead polyps; Stable Isotopes
574	Leiopathes	J2-535	VK862	26-Oct-10	Red Chamber		X	X				DR	PSU	Baums	8:04:00	29.109080	-88.387575	358		orange
575	Leiopathes	J2-535	VK906	26-Oct-10	Biobox Port		X	X	X			DR	PSU	Baums	2:17:00	29.069953	-88.377090	403		white; small colony; live
576	Leiopathes	J2-535	VK906	26-Oct-10	Biobox Port		X	X	X			DR	PSU	Baums	0:38:29	29.069058	-88.376923	393		white big colony; same that the one in the blender; live
1071	Assorted Polynoids	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1072	Sabellid	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1073	Octocoral	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1074	Barnacle	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1075	Clams	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1076	Terabellid	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1077	Sponges	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1078	Worm	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1079	Eunice sp.	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1080	Terabellid?	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1081	Anemone	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1082	Worm tubes	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1083	Gastropod	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1084	Worm?	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1085	Sponge	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1086	Assorted Fauna	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		

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1087	Worms and tube	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
1088	Tubeworm	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock						CF	PSU	Fisher	NA	NA	NA	NA		
2091	Lophelia pertusa	J2-535	VK906	26-Oct-10	Blender	LII-10-2091		X				JL	Temple	Cordes	0:32:41	29.069057	-88.376925	393		
2091	Lophelia pertusa	J2-535	VK906	26-Oct-10	Blender	LII-10-2091		X				JL	Temple	Cordes	0:32:41	29.069057	-88.376925	393		
2091	Lophelia pertusa	J2-535	VK906	26-Oct-10	Blender	LII-10-2091		X				JL	Temple	Cordes	0:32:41	29.069057	-88.376925	393		
2091	Lophelia pertusa	J2-535	VK906	26-Oct-10	Blender			X				CM(inRNALater)	USGS	Morrison	0:32:41	29.069057	-88.376925	393		
3304	Asteroschema sp. 1	J2-535	VK862	26-Oct-10	Q1	Paramuricea LII-10-568	X	X			X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	8:29:00	29.109069	-88.387399	354		subsampled for isotopes to Fisher; main body given to NRDA GU2988-A1026-T-E9-01
3305	Asteroschema sp. 1	J2-535	VK862	26-Oct-10	Blue Chamber	Callagorgia LII-10-571, LII-10-572	X	X			X		WHOI-PSU	Shank-Fisher	8:45:00	29.109011	-88.387293	352		subsampled for isotopes to Fisher
3306	Asteroschema sp. 1	J2-535	VK862	26-Oct-10	Red Chamber	Callagorgia LII-10-573	X	X			X		WHOI-PSU	Shank-Fisher	7:48:00	29.109078	-88.387570	357		subsampled for isotopes to Fisher
3307	Anemone morph 4	J2-535	VK906	26-Oct-10	Blender A	Lophelia LII-10-2091		X					WHOI	Shank	0:25:16	29.069057	-88.376927	394		
3308	Anemone morph 4?	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock	X		X			TS	WHOI	Shank	NA	NA	NA	NA		Formalin
3309	Ophiuroid morph 13	J2-535	VK862	26-Oct-10	Basket	Carbonate Rock	X		X			TS	WHOI	Shank	NA	NA	NA	NA		
4144	Sediment (0-2 cm)	J2-535	VK906	26-Oct-10	PC4							NRDA	USGS-NRDA	Demopoulos	0:17:26	29.069058	-88.376926	394		
4145	Sediment (2-5 cm)	J2-535	VK906	26-Oct-10	PC4							NRDA	USGS-NRDA	Demopoulos	0:17:26	29.069058	-88.376926	394		
4146	Sediment (5-10 cm)	J2-535	VK862	26-Oct-10	PC10							NRDA	USGS-NRDA	Demopoulos	12:00:16	29.106605	-88.384191	314		
4150	Sediment (0-2 cm)	J2-535	VK906	26-Oct-10	PC2							AD	USGS	Demopoulos	0:09:58	29.069006	-88.376936	393		
4151	Sediment (2-5 cm)	J2-535	VK906	26-Oct-10	PC2							AD	USGS	Demopoulos	0:09:58	29.069006	-88.376936	393		

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4152	Sediment (5-10 cm)	J2-535	VK906	26-Oct-10	PC2							AD	USGS	Demopoulos	0:09:58	29.069006	-88.376936	393		
4153	Sediment (0-2 cm)	J2-535	VK906	26-Oct-10	PC1							AD	USGS	Demopoulos	0:13:13	29.069055	-88.376924	393		
4154	Sediment (2-5 cm)	J2-535	VK906	26-Oct-10	PC1							AD	USGS	Demopoulos	0:13:13	29.069055	-88.376924	393		
4155	Sediment (0-5 cm)	J2-535	VK906	26-Oct-10	PC1							AD	USGS	Demopoulos	0:13:13	29.069055	-88.376924	393		
4156	Sediment (0-2 cm)	J2-535	VK906	26-Oct-10	PC6							AD	USGS	Demopoulos	1:07:30	29.069604	-88.376431	399		
4157	Sediment (2-5 cm)	J2-535	VK906	26-Oct-10	PC6							AD	USGS	Demopoulos	1:07:30	29.069604	-88.376431	399		
4158	Sediment (5-7 cm)	J2-535	VK906	26-Oct-10	PC6							AD	USGS	Demopoulos	1:07:30	29.069604	-88.376431	399		
4159	Sediment (0-2 cm)	J2-535	VK906	26-Oct-10	PC7							AD	USGS	Demopoulos	1:09:28	29.069604	-88.376430	399		
4160	Sediment (2-5 cm)	J2-535	VK906	26-Oct-10	PC7							AD	USGS	Demopoulos	1:09:28	29.069604	-88.376430	399		
4161	Sediment (5-7 cm)	J2-535	VK906	26-Oct-10	PC7							AD	USGS	Demopoulos	1:09:28	29.069604	-88.376430	399		
5017	Methane17	J2-535	VK862	26-Oct-10	Niskin G							BD	FSU	McDonald	10:24:08	29.106736	-88.384263	307		
5035	water-DIC	J2-535	VK862	26-Oct-10								BD	FSU	McDonald	NA	NA	NA	NA		
6015	rock	J2-535	VK862	26-Oct-10	rock box							DF	LSU	Roberts	9:12:35	29.108553	-88.386362	316		
6016	rock	J2-535	VK862	26-Oct-10	rock box							DF	LSU	Roberts	9:53:35	29.107410	-88.384893	316		
6017	rock	J2-535	VK862	26-Oct-10	rock box							DF	LSU	Roberts	12:10:27	29.106683	-88.384159	313		
1355	Lophelia , hydroids, anenomes growing on tubeworm	J2-536	MC751	26-Oct-10	Biobox							CF	PSU	Fisher	4:00:42	28.193473	-89.798630	440		
1356	Lophelia growning on tubeworm	J2-536	MC751	26-Oct-10	Biobox						X		PSU	Fisher	4:00:42	28.193475	-89.798633	440		
4165	Sediment (0-2 cm)	J2-536	MC751	26-Oct-10	PC5							NRDA	USGS-NRDA	Demopoulos	23:13:53	28.194034	-89.798337	441		
4166	Sediment (2-5 cm)	J2-536	MC751	26-Oct-10	PC5							NRDA	USGS-NRDA	Demopoulos	23:13:53	28.194034	-89.798337	441		
4167	Sediment (5-10 cm)	J2-536	MC751	26-Oct-10	PC5							NRDA	USGS-NRDA	Demopoulos	23:13:53	28.194034	-89.798337	441		
4168	Sediment (0-2 cm)	J2-536	MC751	26-Oct-10	PC6							AD	USGS	Demopoulos	23:15:27	28.194034	-89.798337	441		
4169	Sediment (2-5 cm)	J2-536	MC751	26-Oct-10	PC6							AD	USGS	Demopoulos	23:15:27	28.194034	-89.798337	441		

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4170	Sediment (5-10 cm)	J2-536	MC751	26-Oct-10	PC6							AD	USGS	Demopoulos	23:15:27	28.194034	-89.798337	441		
4171	Sediment (0-2 cm)	J2-536	MC751	26-Oct-10	PC7							AD	USGS	Demopoulos	23:17:32	28.194033	-89.798337	441		
4172	Sediment (2-5 cm)	J2-536	MC751	26-Oct-10	PC7							AD	USGS	Demopoulos	23:17:32	28.194033	-89.798337	441		
4173	Sediment (5-10 cm)	J2-536	MC751	26-Oct-10	PC7							AD	USGS	Demopoulos	23:17:32	28.194033	-89.798337	441		
4174	Sediment (0-2 cm)	J2-536	MC751	26-Oct-10	PC4							AD	USGS	Demopoulos	23:19:52	28.194033	-89.798337	441		
4175	Sediment (2-5 cm)	J2-536	MC751	26-Oct-10	PC4							AD	USGS	Demopoulos	23:19:52	28.194033	-89.798337	441		
4176	Sediment (5-10 cm)	J2-536	MC751	26-Oct-10	PC4							AD	USGS	Demopoulos	23:19:52	28.194033	-89.798337	441		
4180	Sediment (0-2 cm)	J2-536	MC751	26-Oct-10	PC8							AD	USGS	Demopoulos	2:12:09	28.193628	-89.798713	442		
4181	Sediment (2-5 cm)	J2-536	MC751	26-Oct-10	PC8							AD	USGS	Demopoulos	2:12:09	28.193628	-89.798713	442		
4182	Sediment (5-10 cm)	J2-536	MC751	26-Oct-10	PC8							AD	USGS	Demopoulos	2:12:09	28.193628	-89.798713	442		
4275	Mussel Pot Subsample	J2-536	MC751	26-Oct-10	MPB							AD	USGS	Demopoulos	12:24:45	28.193494	-89.798639	440		2 bottles
6020	rock	J2-536	MC751	26-Oct-10	rock box							DF	LSU	Roberts	23:18:27	28.194038	-89.798307	439		
124	water	J2-536	MC751	27-Oct-10	Niskin H								Temple	Cordes	23:02:01	28.194090	-89.798303	437		
577	Muriceides sp. 1?	J2-536	MC751	27-Oct-10	Q3		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	4:16:14	28.193463	-89.798661	440	X	
578	Paramuricea D	J2-536	MC751	27-Oct-10	Q1A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	2:55:39	28.193561	-89.798710	441	X	
579	Paramuricea D	J2-536	MC751	27-Oct-10	Q5B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:14:08	28.194447	-89.799808	440		
580	Paramuricea D	J2-536	MC751	27-Oct-10	Q5B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:14:08	28.194447	-89.799808	440		
581	Paramuricea multispina	J2-536	MC751	27-Oct-10	Q4A		X	X	X			AQ	Temple	Cordes	5:12:23	28.193423	-89.798639	441	X	
582	Callogorgia sp.	J2-536	MC751	27-Oct-10	Q5A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	5:41:09	28.193408	-89.798598	442	X	

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
583	Callogorgia sp.	J2-536	MC751	27-Oct-10	Q9		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	6:10:27	28.193412	-89.798622	443	X	
584	Paragorgia (red)	J2-536	MC751	27-Oct-10	Q10		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	8:41:55	28.194319	-89.799500	440	X	
585	Paramuricea multispina	J2-536	MC751	27-Oct-10	Q8A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	6:39:44	28.193385	-89.798416	441		
586	Paramuriceidae/Plexauridae sp. A	J2-536	MC751	27-Oct-10	Q6B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:39:54	28.194470	-89.799766	440	X	
587	Callogorgia sp.	J2-536	MC751	27-Oct-10	Q6A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	5:58:12	28.193393	-89.798605	441		
588	Callogorgia sp.	J2-536	MC751	27-Oct-10	Red Chamber		X	X				AQ(inRNAlater)	Temple	Cordes	4:35:04	28.193438	-89.798685	442		
589	Callogorgia sp.	J2-536	MC751	27-Oct-10	Blue Chamber B		X	X				AQ (inRNAlater)	Temple	Cordes	7:24:31	28.193396	-89.798334	441		
590	Callogorgia sp.	J2-536	MC751	27-Oct-10	Blue Chamber A		X	X				AQ (inRNAlater)	Temple	Cordes	7:09:04	28.193443	-89.798331	441		
1089	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1090	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1091	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1092	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1093	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1094	Eunicidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Were growing on dead corals
1095	Eunicidae	J2-536	MC751	27-Oct-10	MPB							CF	PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1096	Hippolitedae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1097	Amphipod sp. 1	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Pelagic?

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1098	Caridean	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1099	Amphipod sp. 1	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Pelagic?
1100	Amphipod sp. 1	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Pelagic?
1301	Amphipod sp. 2	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Pelagic?
1302	Octocoral	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1303	Octocoral	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1304	Hydroid	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1305	Hydroid	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1306	Hydroid	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1307	Hydroid	J2-536	MC751	27-Oct-10	MPB							CF	PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1308	Polynoid	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1309	Amphipod sp. 1	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		Pelagic?
1310	Amphipod sp. 2	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1311	Amphipod sp. 2	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1312	Clam	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1313	Lollipop sponge	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1314	Lollipop sponge	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1315	Lollipop sponge	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1316	Lollipop sponge	J2-536	MC751	27-Oct-10	MPB							CF	PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1317	Lophelia in skeleton	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1318	Terabellid	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1319	Hesonidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1320	Hesonidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1321	Hesonidae	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1322	Tubeworms	J2-536	MC751	27-Oct-10	MPB							CF	PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1323	Anenome	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1324	Lollipop sponge	J2-536	MC751	27-Oct-10	MPB						X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1325	Benthocometes robustus	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	11:03:53	28.193464	-89.798630	440		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1326	Benthocometes robustus	J2-536	MC751	27-Oct-10	Red Slurp							CF	PSU	Fisher	11:03:53	28.193464	-89.798630	440		
1327	Hydroid	J2-536	MC751	27-Oct-10	Blue Slurp							CF	PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1328	Hydroid	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1329	Hydroid	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1330	Hydroid	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1331	Shrimp	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1332	Hippolitedae	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1333	Hippolitedae	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1334	Hippolitedae	J2-536	MC751	27-Oct-10	Blue Slurp						X		PSU	Fisher	11:28:30	28.193463	-89.798629	440		
1335	Munidopsis (No stripes)	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:59:53	28.193464	-89.798629	440		
1336	Munidopsis (One Stripe)	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:59:53	28.193464	-89.798629	440		
1337	Munidopsis (One Stripe)	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:59:53	28.193464	-89.798629	440		
1338	Munidopsis (One Stripe)	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:59:53	28.193464	-89.798629	440		
1339	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1340	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1341	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1342	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1343	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1344	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1345	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1346	Hippolitedae	J2-536	MC751	27-Oct-10	Red Slurp						X		PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1347	Gastropod	J2-536	MC751	27-Oct-10	Red Slurp							CF	PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1348	Worms	J2-536	MC751	27-Oct-10	Red Slurp							CF	PSU	Fisher	10:57:40	28.193464	-89.798630	440		
1349	Lamilibrachia (vest)	J2-536	MC751	27-Oct-10	MPB	LII-10-1350					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1350	Lamilibrachia (trophosome)	J2-536	MC751	27-Oct-10	MPB	LII-10-1349					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1351	Lamilibrachia (vest)	J2-536	MC751	27-Oct-10	MPB	LII-10-1352					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1352	Lamilibrachia (trophosome)	J2-536	MC751	27-Oct-10	MPB	LII-10-1351					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1353	Lamilibrachia (vest)	J2-536	MC751	27-Oct-10	MPB	LII-10-1354					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
1354	Lamilibrachia (trophosome)	J2-536	MC751	27-Oct-10	MPB	LII-10-1353					X		PSU	Fisher	12:24:45	28.193494	-89.798639	440		
2092	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q3A	LII-10-2092		X				JL	Temple	Cordes	3:43:47	28.193473	-89.798654	441		
2092	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q3A			X	X	X	X	CM-JL	USGS-PSU-Temple	Morrison-Fisher-Cordes	3:43:47	28.193473	-89.798654	441		38
2093	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q4A			X	X	X	x	CM-JL	USGS-PSU-Temple	Morrison-Fisher-Cordes	3:54:05	28.193472	-89.798654	441		
2094	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q1A	LII-10-2094		X				JL	Temple	Cordes	8:27:59	28.194157	-89.799253	439		
2094	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q1B			X	X	X	X	CM-JL-SB	USGS-PSU-Temple-MCBI	Morrison-Fisher-Cordes-Brooke	8:27:59	28.194157	-89.799253	439		
2095	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q5B			X	X	X		CM	USGS	Morrison	9:12:50	28.193463	-89.798661	440		
2096	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q10			X	X	X	X	CM-SB	USGS-PSU-MCBI	Morrison-Fisher-Brooke	8:38:37	28.194323	-89.799502	440		
2097	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q8B			X	X	X		CM	USGS	Morrison	6:49:20	28.193428	-89.798382	440		
2098	Lophelia pertusa	J2-536	MC751	27-Oct-10	Q7			X	X	X		CM	USGS	Morrison	9:47:48	28.194488	-89.799751	441		
2099	Lophelia pertusa	J2-536	MC751	27-Oct-10	Blue Chamber	LII-10-2099		X				JL	Temple	Cordes	7:33:55	28.193413	-89.798378	441		
2099	Lophelia pertusa	J2-536	MC751	27-Oct-10	Blue Chamber	LII-10-2099		X				JL	Temple	Cordes	7:33:55	28.193413	-89.798378	441		
2099	Lophelia pertusa	J2-536	MC751	27-Oct-10	Blue Chamber	LII-10-2099		X				JL	Temple	Cordes	7:33:55	28.193413	-89.798378	441		
2099	Lophelia pertusa	J2-536	MC751	27-Oct-10	Blue Chamber			X				CM-JL(inRNALater)	USGS-Temple	Morrison-Cordes	7:33:55	28.193413	-89.798378	441		DVL

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2100	Eumunida picta	J2-536	MC751	27-Oct-10	Q13			X	X			CM-MN	USGS	Morrison	NA	NA	NA	NA		unintentional collection
2101	Lophelia pertusa	J2-536	MC751	27-Oct-10	Blue Slurp				X			CM-MN	USGS	Morrison	11:32:08	29.069057	-88.376925	441		
2102	Munidopsis	J2-536	MC751	27-Oct-10	Blue Slurp				X		X	CM-MN	USGS-PSU	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2103	Munidopsis	J2-536	MC751	27-Oct-10	Blue Slurp				X		X	CM-MN	USGS-PSU	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2104	Munidopsis	J2-536	MC751	27-Oct-10	Blue Slurp				X		X	CM-MN	USGS-PSU	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2105	Munidopsis	J2-536	MC751	27-Oct-10	Blue Slurp				X		X	CM-MN	USGS-PSU	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2106	Munidopsis	J2-536	MC751	27-Oct-10	Blue Slurp				X		X	CM-MN	USGS-PSU	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2107	Munidopsis	J2-536	MC751	27-Oct-10	Red Slurp				X			CM-MN	USGS-PSU	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		
2108	Munidopsis	J2-536	MC751	27-Oct-10	Red Slurp				X		X	CM-MN-NRDA	USGS-PSU-NRDA	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		
2109	Echinus tylodes	J2-536	MC751	27-Oct-10	Biobox Stbd	L210-536-3325			X		X	NRDA	USGS-PSU-NRDA	Morrison-Fisher	12:01:59	28.193485	-89.798643	441		
2110	Eumunida picta	J2-536	MC751	27-Oct-10	Blue Slurp			X	X		X	NRDA	USGS-PSU-NRDA	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2111	Eumunida picta	J2-536	MC751	27-Oct-10	Blue Slurp			X	X		X	NRDA	USGS-PSU-NRDA	Morrison-Fisher	11:08-11:28	28.193460	-89.798600	441		
2112	Munidopsis	J2-536	MC751	27-Oct-10	Red Slurp			X			X	CM-MN	USGS-PSU	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		
2113	Munida	J2-536	MC751	27-Oct-10	Red Slurp			X			X	CM-MN	USGS-PSU	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		
2114	Eumunida picta	J2-536	MC751	27-Oct-10	Red Slurp			X	X		X	NRDA	USGS-PSU-NRDA	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		
2115	Eumunida picta	J2-536	MC751	27-Oct-10	Red Slurp			X	X		X	NRDA	USGS-PSU-NRDA	Morrison-Fisher	10:57:40	28.193464	-89.798630	440		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2116	Lophelia pertusa	J2-536	MC751	27-Oct-10	Red Chamber			X				CM(inRNALater)	USGS	Morrison	4:56:07	28.193424	-89.798637	441		
3310	Astrogomphus	J2-536	MC751	27-Oct-10	Q3	Muriceides LII-10-577	X				X		WHOI-PSU	Shank-Fisher	4:16:14	28.193463	-89.798661	440		subsampled to Fisher for isotopes
3311	Hydroid	J2-536	MC751	27-Oct-10	Q3	Lophelia LII-10-2092	X						WHOI	Shank	03:43-03:48	28.193470	-89.798650	441		
3312	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q1A	Paramuricea LII-10-578	X		X		X		WHOI-PSU	Shank-Fisher	2:55:39	28.193561	-89.798710	441	X	subsampled to Fisher for isotopes; stored in 5% Formalin
3313	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q4A	Paramuricea LII-10-581	X		X		X		WHOI-PSU	Shank-Fisher	5:12:23	28.193423	-89.798639	441	X	subsampled to Fisher for isotopes; stored in 5% Formalin
3314	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q9	Callogorgia LII-10-583	X		X		X		WHOI-PSU	Shank-Fisher	6:10:27	28.193412	-89.798622	443	X	subsampled to Fisher for isotopes; stored in 5% Formalin
3315	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q5A	Callogorgia LII-10-582	X				X		WHOI-PSU	Shank-Fisher	5:41:09	28.193408	-89.798598	442	X	just arms; subsampled to Fisher for isotopes
3316	Callogorgia sp.	J2-536	MC751	27-Oct-10	Q9	LII-10-583	X				X		WHOI-PSU	Shank-Fisher	6:10:27	28.193412	-89.798622	443		
3317	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q10	Red Paragorgia LII-10-584	X		X		X		WHOI-PSU	Shank-Fisher	8:41:55	28.194319	-89.799500	440	X	subsampled to Fisher for isotopes; stored in 5% Formalin
3318	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q8A	Paramuricea multispina LII-10-585	X		X		X		WHOI-PSU	Shank-Fisher	6:39:44	28.193385	-89.798416	441		subsampled to Fisher for isotopes; stored in 5% Formalin
3319	Astrogomphus	J2-536	MC751	27-Oct-10	Q6B	Unknown octocoral LII-10-586	X				X		WHOI-PSU	Shank-Fisher	9:39:54	28.194470	-89.799766	440	X	subsampled to Fisher for isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3320	snail morph 2	J2-536	MC751	27-Oct-10	Q7	Lophelia LII-10-2098	X						WHOI	Shank	9:47:48	28.194488	-89.799751	441		
3321	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Q6A	Callogorgia LII-10-587	X		X		X		WHOI-PSU	Shank-Fisher	5:58:12	28.193393	-89.798605	441		subsampled to Fisher for isotopes; stored in 5% Formalin
3322	Amphipod	J2-536	MC751	27-Oct-10	Blue Chamber	Lophelia LII-10-2099			X				WHOI	Shank	7:33:55	28.193413	-89.798378	441	X	Voucher
3323	Hydroid	J2-536	MC751	27-Oct-10	Blue Chamber	Lophelia LII-10-2099	X						WHOI	Shank	7:33:55	28.193413	-89.798378	441		in RNALater
3324	Callogorgia sp.	J2-536	MC751	27-Oct-10	Q2		X					NRDA	WHOI-NRDA	Shank	3:25:08	28.193580	-89.798762	441	X	subsample; rest to NRDA: GU2889-A1026-T-E9-01
3325	Echinus tylodes	J2-536	MC751	27-Oct-10	Biobox Stbd	LII-10-2109	X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	12:01:59	28.193485	-89.798643	441	X	subsampled to Fisher for isotopes; subsample to CM; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-01
3326	Acesta sp.	J2-536	MC751	27-Oct-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	11:56-11:59	28.193500	-89.798600	441	X	subsampled to Fisher for isotopes; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-02
3327	Acesta sp.	J2-536	MC751	27-Oct-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	11:56-11:59	28.193500	-89.798600	441	X	subsampled to Fisher for isotopes; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-03

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3328	Eumunida picta	J2-536	MC751	27-Oct-10	Blue Slurp		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	11:08-11:28	28.193460	-89.798600	441	X	subsampled to Fisher for isotopes; subsample to CM2110; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-04
3329	Eumunida picta	J2-536	MC751	27-Oct-10	Blue Slurp		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	11:08-11:28	28.193460	-89.798600	441	X	subsampled to Fisher for isotopes; subsample to CM2111; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-05
3330	Eumunida picta	J2-536	MC751	27-Oct-10	Red Slurp		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	10:59:53	28.193464	-89.798629	441	X	subsampled to Fisher for isotopes; subsample to CM; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-06
3331	Eumunida picta	J2-536	MC751	27-Oct-10	Red Slurp		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	10:59:53	28.193464	-89.798629	441	X	subsampled to Fisher for isotopes; subsample to CM; subsample to Shank; rest to NRDA: GU2889-A1027-T-E9-07
3332	small shrimp	J2-536	MC751	27-Oct-10	MPB		X					CF	WHOI-PSU	Shank-Fisher	12:24:45	28.193494	-89.798639	440	X	Hipployte; Fisher 1096

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3333	Caridean shrimp	J2-536	MC751	27-Oct-10	MPB				X			CF	WHOI-PSU	Shank-Fisher	12:24:45	28.193494	-89.798639	440	X	Voucher; Fisher L2-10-1098
3334	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Red Chamber	Callogorgia LII-10-588		X					WHOI	Shank	4:35:04	28.193438	-89.798685	442		soak O/N in RNALater at 4C then freeze at -80C
3335	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Blue Chamber	Callogorgia LII-10-589 or LII-10-590		X					WHOI	Shank	07:09-07:24	28.193400	-89.798330	441		soak O/N in RNALater at 4C then freeze at -80C
3336	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Blue Chamber	Callogorgia LII-10-589 or LII-10-590		X					WHOI	Shank	07:09-07:24	28.193400	-89.798330	441		soak O/N in RNALater at 4C then freeze at -80C
3337	snail morph 2	J2-536	MC751	27-Oct-10	Red Chamber	Lophelia LII-10-2116		X					WHOI	Shank	4:56:07	28.193424	-89.798637	441		soak O/N in RNALater at 4C then freeze at -80C
3338	stalked sponges	J2-536	MC751	27-Oct-10	Blue Chamber	Lophelia LII-10-2099		X					WHOI	Shank	7:33:55	28.193413	-89.798378	441		soak O/N in RNALater at 4C then freeze at -80C
3344	Tubeworm	J2-536	MC751	27-Oct-10	Blender A			X					WHOI	Shank	11:21:09	28.193462	-89.798630	441		soak O/N in RNALater at 4C then freeze at -80C; not blended
3345	Asteroschema sp. 1	J2-536	MC751	27-Oct-10	Blender B	Callogorgia		X					WHOI	Shank	9:25:31	28.194447	-89.799808	440		blended
4177	Sediment (0-2 cm)	J2-536	MC751	27-Oct-10	PC2							AD	USGS	Demopoulos	1:55:31	28.193629	-89.798713	442		
4178	Sediment (2-5 cm)	J2-536	MC751	27-Oct-10	PC2							AD	USGS	Demopoulos	1:55:31	28.193629	-89.798713	442		
4179	Sediment (5-10 cm)	J2-536	MC751	27-Oct-10	PC2							AD	USGS	Demopoulos	1:55:31	28.193629	-89.798713	442		
4183	Sediment (0-2 cm)	J2-536	MC751	27-Oct-10	PC1							AD	USGS	Demopoulos	2:06:00	28.193628	-89.798713	442		
4184	Sediment (2-5 cm)	J2-536	MC751	27-Oct-10	PC1							AD	USGS	Demopoulos	2:06:00	28.193628	-89.798713	442		
4185	Sediment (5-10 cm)	J2-536	MC751	27-Oct-10	PC1							AD	USGS	Demopoulos	2:06:00	28.193628	-89.798713	442		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4186	Sediment (0-2 cm)	J2-536	MC751	27-Oct-10	PC9							AD	USGS	Demopoulos	12:13:29	28.193517	-89.798660	440		
4187	Sediment (2-5 cm)	J2-536	MC751	27-Oct-10	PC9							AD	USGS	Demopoulos	12:13:29	28.193517	-89.798660	440		
4188	Sediment (5-10 cm)	J2-536	MC751	27-Oct-10	PC9							AD	USGS	Demopoulos	12:13:29	28.193517	-89.798660	440		
4189	Sediment (0-2 cm)	J2-536	MC751	27-Oct-10	PC10							AD	USGS	Demopoulos	12:08:29	28.193517	-89.798659	440		
4190	Sediment (5-10 cm)	J2-536	MC751	27-Oct-10	PC10							AD	USGS	Demopoulos	12:08:29	28.193517	-89.798659	440		
4191	Sediment (0-2 cm)	J2-536	MC751	27-Oct-10	PC3							AD	USGS	Demopoulos	12:10:47	28.193517	-89.798660	440		
4192	Sediment (2-5 cm)	J2-536	MC751	27-Oct-10	PC3							AD	USGS	Demopoulos	12:10:47	28.193517	-89.798660	440		
4193	Sediment (5-10 cm)	J2-536	MC751	27-Oct-10	PC3							AD	USGS	Demopoulos	12:10:47	28.193517	-89.798660	440		
4206	Sediment (2-5 cm)	J2-536	MC751	27-Oct-10	PC10							AD	USGS	Demopoulos	12:08:29	28.193517	-89.798659	440		
5018	Methane18	J2-536	MC751	27-Oct-10	Niskin H							BD	FSU	McDonald	23:02:01	28.194090	-89.798303	437		
5036	water-DIC	J2-536	MC751	27-Oct-10								BD	FSU	McDonald	NA	NA	NA	NA		
6018	rock	J2-536	MC751	27-Oct-10	rock box							DF	LSU	Roberts	12:32:30	28.193490	-89.798666	440		
6019	rock	J2-536	MC751	27-Oct-10	rock box							DF	LSU	Roberts	12:42:57	28.193487	-89.798720	442		
3339	Ophiuroid morph 14	J2-537	MC794 Gulfoil	27-Oct-10	Biobox Stbd	sediment	X						WHOI	Shank	22:15:06	28.160607	-89.755442	531	X	Ophiacantha?
3340	Ophiuroid morph 14	J2-537	MC794 Gulfoil	27-Oct-10	Biobox Stbd	sediment	X		X			TS	WHOI	Shank	22:15:06	28.160607	-89.755442	531		Voucher; no curly arm
3341	Ophiuroid morph 14	J2-537	MC794 Gulfoil	27-Oct-10	Biobox Stbd	sediment	X		X			TS	WHOI	Shank	22:15:06	28.160607	-89.755442	531		Voucher curly arm
3342	Ophiuroid morph 14	J2-537	MC794 Gulfoil	27-Oct-10	Biobox Stbd	sediment	X						WHOI	Shank	22:15:06	28.160607	-89.755442	531		
125	water	J2-537	MC794 Gulfoil	28-Oct-10	Niskin H								Temple	Cordes	16:31:26	28.161336	-89.752292	531		
1101	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1102	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1103	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1104	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1105	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1106	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1107	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF							CF	PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1108	Anenome	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1109	Gastropod	J2-537	MC794 Gulfoil	28-Oct-10	MPF							CF	PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1110	Amphipod sp. 1 (red)	J2-537	MC794 Gulfoil	28-Oct-10	MPF							CF	PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1111	Amphipod sp. 2 (white)	J2-537	MC794 Gulfoil	28-Oct-10	MPF							CF	PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1112	Eunicid	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1113	Amphipod sp. 2 (white)	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1114	Amphipod sp. 2 (white)	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1115	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	MPF							CF	PSU	Fisher	15:59:07	28.161273	-89.752339	532		
1116	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	MPF						X		PSU	Fisher	15:59:07	28.161273	-89.752339	532		
2117	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q4A			X	X	X		CM	USGS	Morrison	14:20:28	28.160316	-89.752724	535		
2118	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q6A			X	X	X		CM	USGS	Morrison	15:21:21	28.161222	-89.752312	532		
2119	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q5A			X	X	X		CM	USGS	Morrison	14:34:52	28.160328	-89.752588	536		
2120	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q3			X	X	X		CM-SB	USGS-MCBI	Morrison-Brooke	13:23:52	28.160887	-89.752650	532		
2121	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q2B			X	X	X		CM	USGS	Morrison	13:55:12	28.160586	-89.752683	533		
2122	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q2A			X	X	X		CM	USGS	Morrison	12:59:44	28.161208	-89.752541	532		
2123	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q1B			X	X	X		CM	USGS	Morrison	12:54:52	28.161264	-89.752510	532		
2124	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	Q1A			X	X	X		CM	USGS	Morrison	12:28:53	28.161372	-89.752489	532		
2125	Lophelia pertusa	J2-537	MC794 Gulfoil	28-Oct-10	MPF			X		X		CF	USGS-PSU	Morrison-Fisher	15:59:07	28.161273	-89.752339	532		

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3343	Anemone small pink morph	J2-537	MC794 Gulfoil	28-Oct-10	Q6A	Lophelia LII-10-2118	X		X			TS	WHOI	Shank	15:21:21	28.161222	-89.752312	532	X	Voucher
4194	Sediment (0-2 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	16:27:20	28.161388	-89.752310	532		
4195	Sediment (2-5 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	16:27:20	28.161388	-89.752310	532		
4196	Sediment (5-10 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC6							NRDA	USGS-NRDA	Demopoulos	16:27:20	28.161388	-89.752310	532		
4197	Sediment (0-2 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC7							AD	USGS	Demopoulos	16:22:43	28.161390	-89.752331	532		
4198	Sediment (2-5 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC7							AD	USGS	Demopoulos	16:22:43	28.161390	-89.752331	532		
4199	Sediment (5-10 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC7							AD	USGS	Demopoulos	16:22:43	28.161390	-89.752331	532		
4200	Sediment (0-2 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC9							AD	USGS	Demopoulos	16:15:35	28.161348	-89.752335	532		
4201	Sediment (2-5 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC9							AD	USGS	Demopoulos	16:15:35	28.161348	-89.752335	532		
4202	Sediment (5-10 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC9							AD	USGS	Demopoulos	16:15:35	28.161348	-89.752335	532		
4203	Sediment (0-2 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC10							AD	USGS	Demopoulos	16:18:40	28.161363	-89.752340	532		
4204	Sediment (2-5 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC10							AD	USGS	Demopoulos	16:18:40	28.161363	-89.752340	532		
4205	Sediment (5-10 cm)	J2-537	MC794 Gulfoil	28-Oct-10	PC10							AD	USGS	Demopoulos	16:18:40	28.161363	-89.752340	532		
4276	Mussel Pot Subsample	J2-537	MC794 Gulfoil	28-Oct-10	MPF							AD	USGS	Demopoulos	15:59:07	28.161273	-89.752339	532		16 bottles
5019	Methane19	J2-537	MC794 Gulfoil	28-Oct-10	Niskin H							BD	FSU	McDonald	16:31:26	28.161336	-89.752292	531		
1121	Clam adductor	J2-538	MC118	29-Oct-10	Q1A						X		PSU	Fisher	23:35:21	28.856946	-88.494394	883		
1122	Clam mantle	J2-538	MC118	29-Oct-10	Q1A						X		PSU	Fisher	23:35:21	28.856946	-88.494394	883		
1124	Clam mantle	J2-538	MC118	29-Oct-10	Q2A	LII-10-1125					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1125	Clam adductor	J2-538	MC118	29-Oct-10	Q2A	LII-10-1124					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1126	Clam mantle	J2-538	MC118	29-Oct-10	Q2A	LII-10-1127					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1127	Clam adductor	J2-538	MC118	29-Oct-10	Q2A	LII-10-1126					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		

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1128	Clam mantle	J2-538	MC118	29-Oct-10	Q2A	LII-10-1129, LII-10- 1130					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1129	Clam adductor	J2-538	MC118	29-Oct-10	Q2A	LII-10-1128, LII-10-1130					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1130	Limpit	J2-538	MC118	29-Oct-10	Q2A	LII-10-1128, LII-10-1129					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1131	Clam mantle	J2-538	MC118	29-Oct-10	Q2A	LII-10-1132					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
1132	Clam adductor	J2-538	MC118	29-Oct-10	Q2A	LII-10-1131					X		PSU	Fisher	23:00:53	28.856969	-88.494290	884		
3359	Calyptogena ponderosa	J2-538	MC118	29-Oct-10	Q1A		X	X				NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:35:21	28.856946	-88.494394	882	X	2 samples of gill and mantle frozen at -80C; 2 samples of gill and mantle incubated at4C in RNALater O/N then frozen at -80C; rest to NRDA: GU2888-A1029-T-E9-05
3360	Calyptogena ponderosa	J2-538	MC118	29-Oct-10	Q2A		X	X				NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:00:53	28.856969	-88.494290	884	X	2 samples of gill and mantle frozen at -80C; 2 samples of gill and mantle incubated at4C in RNALater O/N then frozen at -80C; rest to NRDA: GU2888-A1029-T-E9-01

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3361	Calyptogena ponderosa	J2-538	MC118	29-Oct-10	Q2A		X	X				NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:00:53	28.856969	-88.494290	884	X	2 samples of gill and mantle frozen at -80C; 2 samples of gill and mantle incubated at4C in RNALater O/N then frozen at -80C; rest to NRDA: GU2888-A1029-T-E9-02
3362	Calyptogena ponderosa	J2-538	MC118	29-Oct-10	Q2A		X	X				NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:00:53	28.856969	-88.494290	884	X	2 samples of gill and mantle frozen at -80C; 2 samples of gill and mantle incubated at4C in RNALater O/N then frozen at -80C; rest to NRDA: GU2888-A1029-T-E9-03
3363	Calyptogena ponderosa	J2-538	MC118	29-Oct-10	Q2A		X	X				NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:00:53	28.856969	-88.494290	884	X	2 samples of gill and mantle frozen at -80C; 2 samples of gill and mantle incubated at4C in RNALater O/N then frozen at -80C; rest to NRDA: GU2888-A1029-T-E9-04

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3365	mussels	J2-538	MC118	29-Oct-10	Q2A	C. ponderosa TS3359-TS3363	X						WHOI-PSU	Shank-Fisher	23:00:53	28.856969	-88.494290	884		
3366	Limpet	J2-538	MC118	29-Oct-10	Q2A	C. ponderosa TS3361			X		X	TS	WHOI	Shank	23:00:53	28.856969	-88.494290	884	X	subsample to CF for isotopes; Voucher
4225	Sediment (0-2 cm)	J2-538	MC118	29-Oct-10	PC7							AD	USGS	Demopoulos	23:58:35	28.856937	-88.494372	883		
4226	Sediment (2-5 cm)	J2-538	MC118	29-Oct-10	PC7							AD	USGS	Demopoulos	23:58:35	28.856937	-88.494372	883		
4227	Sediment (5-10 cm)	J2-538	MC118	29-Oct-10	PC7							AD	USGS	Demopoulos	23:58:35	28.856937	-88.494372	883		
4231	Sediment (0-2 cm)	J2-538	MC118	29-Oct-10	PC9							AD	USGS	Demopoulos	23:51:02	28.856937	-88.494363	883		
4232	Sediment (2-5 cm)	J2-538	MC118	29-Oct-10	PC9							AD	USGS	Demopoulos	23:51:02	28.856937	-88.494363	883		
4233	Sediment (5-10 cm)	J2-538	MC118	29-Oct-10	PC9							AD	USGS	Demopoulos	23:51:02	28.856937	-88.494363	883		
4234	Sediment (0-2 cm)	J2-538	MC118	29-Oct-10	PC10							AD	USGS	Demopoulos	23:53:42	28.856945	-88.494362	883		
4235	Sediment (2-5 cm)	J2-538	MC118	29-Oct-10	PC10							AD	USGS	Demopoulos	23:53:42	28.856945	-88.494362	883		
4236	Sediment (5-10 cm)	J2-538	MC118	29-Oct-10	PC10							AD	USGS	Demopoulos	23:53:42	28.856945	-88.494362	883		
4278	Mussel Pot Subsample	J2-538	MC118	29-Oct-10	MPB							AD	USGS	Demopoulos	11:38:52	28.852690	-88.492564	884		
591	Paramuricea B	J2-538	MC118	30-Oct-10	Biobox Stbd		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	6:41:34	28.852677	-88.491919	885		
592	Chrysogorgia	J2-538	MC118	30-Oct-10	Biobox Stbd		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	4:32:54	28.852589	-88.492672	883		
593	Paramuricea B	J2-538	MC118	30-Oct-10	Q4A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	6:07:16	28.852629	-88.491825	884		
594	Paramuricea B	J2-538	MC118	30-Oct-10	Q6A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	3:55:59	28.852853	-88.492189	884		
595	Chrysogorgia	J2-538	MC118	30-Oct-10	Q1A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:34:15	28.856008	-88.493618	889		
596	Octocoral?	J2-538	MC118	30-Oct-10	Q1A							AQ	Temple	Cordes	0:34:15	28.856008	-88.493618	889		on LII-10-595
597	Paramuricea E	J2-538	MC118	30-Oct-10	Q3B		X	X	X			AQ	Temple	Cordes	1:22:11	28.855867	-88.493561	888		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
598	Paramuricea B	J2-538	MC118	30-Oct-10	Q3A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	1:02:35	28.855866	-88.493509	888		
599	Paramuricea B	J2-538	MC118	30-Oct-10	Q5A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	1:54:00	28.855669	-88.493631	887		
600	Paramuricea B	J2-538	MC118	30-Oct-10	Black Slurp		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:45:47	28.856010	-88.493622	889		says red slurp in log
1117	Hippolitedae?	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1118	Hydroid?	J2-538	MC118	30-Oct-10	MPB						X		PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1119	Crab leg	J2-538	MC118	30-Oct-10	MPB						X		PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1120	Big Crab Leg	J2-538	MC118	30-Oct-10	Biobox Stbd						X		PSU	Fisher	0:28:08	28.856032	-88.493607	889		
1123	Hippolitedae?	J2-538	MC118	30-Oct-10	MPF						X	CF	PSU	Fisher	10:43:31	28.852751	-88.492624	883		
1133	Rochinia sp.	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1134	Hesonidae	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1135	Assorted Polychaete	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1136	Chiton	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1137	Hydroids	J2-538	MC118	30-Oct-10	MPB							CF	PSU	Fisher	11:38:52	28.852690	-88.492564	884		
1138	Acestea Adductor	J2-538	MC118	30-Oct-10	Biobox Stbd	LII-10-1139						CF	PSU	Fisher	0:29:08	28.856028	-88.493609	889		
1139	Acestea mantle	J2-538	MC118	30-Oct-10	Biobox Stbd	LII-10-1138						CF	PSU	Fisher	0:29:08	28.856049	-88.493628	889		
1140	Unknown Worm	J2-538	MC118	30-Oct-10	MPF						X		PSU	Fisher	10:43:31	28.852751	-88.492624	883		
1141	Cup Coral	J2-538	MC118	30-Oct-10	Red Slurp						X		PSU	Fisher	1:45:36	28.855629	-88.493665	887		
2126	Chirostylid	J2-538	MC118	30-Oct-10	Biobox Stbd	Chrysogorgia		X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	4:32:54	28.852589	-88.492672	883	X	
2127	Madrepora	J2-538	MC118	30-Oct-10	MPF			X		X		CM	USGS	Morrison	10:43:31	28.852751	-88.492624	883		
2128	Chirostylid juvenile	J2-538	MC118	30-Oct-10	Biobox Stbd	Chrysogorgia		X				CM-MN	USGS	Morrison	4:32:54	28.852589	-88.492672	883	X	
2129	Madrepora	J2-538	MC118	30-Oct-10	Q7A			X	X			CM	USGS	Morrison	12:17:12	28.852696	-88.492585	884		
2130	Desmophyllum?	J2-538	MC118	30-Oct-10	MPF			X				CM	USGS	Morrison	10:43:31	28.852751	-88.492624	883		
2131	Chirostylid	J2-538	MC118	30-Oct-10	Q1A	Chrysogorgia		X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	0:34:15	28.856008	-88.493618	889		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2132	Chirostylid	J2-538	MC118	30-Oct-10	Q1A	Chrysogorgia		X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	0:34:15	28.856008	-88.493618	889		
2133	Madrepora	J2-538	MC118	30-Oct-10	Q8A			X	X			CM	USGS	Morrison	12:24:11	28.852736	-88.492604	884		
2134	Madrepora	J2-538	MC118	30-Oct-10	Q5B			X	X			CM	USGS	Morrison	2:24:08	28.855552	-88.493506	886		
2135	Munida sp.?	J2-538	MC118	30-Oct-10	Black Slurp			X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	0:45:47	28.856010	-88.493622	889	X	
2136	Munida sp.? Juv.	J2-538	MC118	30-Oct-10	Black Slurp			X				CM-MN	USGS	Morrison	0:45:47	28.856010	-88.493622	889	X	
2137	solitary coral	J2-538	MC118	30-Oct-10	Black Slurp			X				CM	USGS	Morrison	0:45:47	28.856010	-88.493622	889		
2138	Caryophyllia sp.	J2-538	MC118	30-Oct-10	Black Slurp			X				CM	USGS	Morrison	0:45:47	28.856010	-88.493622	889		
2139	Rochinia tanneri?	J2-538	MC118	30-Oct-10	MPB			X			X	CF	USGS-PSU	Morrison-Fisher	11:38:52	28.852690	-88.492564	884		
2140	solitary coral	J2-538	MC118	30-Oct-10	Black Slurp							CM	USGS	Morrison	0:45:47	28.856010	-88.493622	889		
2141	solitary coral	J2-538	MC118	30-Oct-10	Black Slurp							CM	USGS	Morrison	0:45:47	28.856010	-88.493622	889		
2142	solitary coral	J2-538	MC118	30-Oct-10	Black Slurp							CM	USGS	Morrison	0:45:47	28.856010	-88.493622	889		
2143	Echinus sp.	J2-538	MC118	30-Oct-10	Q14			X				NRDA	USGS-NRDA	Morrison	6:18:10	28.852631	-88.491867	884		
2144	Munidopsis sp.	J2-538	MC118	30-Oct-10	Red Slurp			X			X	CM-MN	USGS-PSU	Morrison-Fisher	1:45:36	28.855629	-88.493665	887		
2145	Munidopsis sp. Juv.	J2-538	MC118	30-Oct-10	Red Slurp			X				CM-MN	USGS-PSU	Morrison-Fisher	1:45:36	28.855629	-88.493665	887		
2146	Rochinia tanneri?	J2-538	MC118	30-Oct-10	Red Slurp			X				CF	USGS-PSU	Morrison-Fisher	1:45:36	28.855629	-88.493665	887		
3346	Asteroschema sp. 1	J2-538	MC118	30-Oct-10	Biobox Stbd	Paramuricea B LII-10-591	X		X		X		WHOI-PSU	Shank-Fisher	6:41:34	28.852677	-88.491919	885	X	
3347	Chirostylid	J2-538	MC118	30-Oct-10	Biobox Stbd	Chrysogorgia LII-10-592	X				X	CM	WHOI-PSU-USGS	Shank-Fisher-Morrison	4:32:54	28.852589	-88.492672	883	X	
3348	Aplacophoran	J2-538	MC118	30-Oct-10	Biobox Stbd	Paramuricea B LII-10-591		X	X				WHOI	Shank	6:07:16	28.852629	-88.491825	884		
3349	Asteroschema sp. 1	J2-538	MC118	30-Oct-10	Q4A	Paramuricea B LII-10-594	X		X		X		WHOI-PSU	Shank-Fisher	1:22:11	28.855867	-88.493561	888	X	

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3350	Asteroschema sp. 1	J2-538	MC118	30-Oct-10	Q6A	Paramuricea B LII-10-594	X		X		X		WHOI-PSU	Shank-Fisher	3:55:59	28.852853	-88.492189	884	X	
3351	Contrainea macleani	J2-538	MC118	30-Oct-10	Q6A	sediment	X						WHOI	Shank	3:55:59	28.852853	-88.492189	884	X	
3352	mussels	J2-538	MC118	30-Oct-10	Q6A	Contrainea macleani TS3351	X						WHOI	Shank	3:55:59	28.852853	-88.492189	884	X	
3353	Chirostylid	J2-538	MC118	30-Oct-10	Q1A	Chrysogorgia LII-10-595	X						WHOI	Shank	0:34:15	28.856008	-88.493618	889	X	
3354	mussels-petrified	J2-538	MC118	30-Oct-10	Biobox Stbd	Paramuricea B LII-10-591							WHOI	Shank	6:41:34	28.852677	-88.491919	885		Iolas?; 2 dried
3355	Chaceon crab	J2-538	MC118	30-Oct-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	0:28:08	28.856032	-88.493607	889	X	subsample for genetics; subsample to CF for isotopes; whole body to NRDA: GU2888-A1029-T-E9-06
3356	Barnacle morph 3?	J2-538	MC118	30-Oct-10	Biobox Stbd	Chaceon crab TS3355	X						WHOI	Shank	0:28:08	28.856032	-88.493607	889	X	2 tubesx20; 1 tubex23
3357	Asteroschema sp. 1	J2-538	MC118	30-Oct-10	Q3A		X		X		X		WHOI-PSU	Shank-Fisher	1:02:35	28.855866	-88.493509	888		subsample for genetics; subsample to CF for isotopes; whole body in 5% formalin for 8 hours and transfer to 70% Ethanol

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3358	Asteroschema sp. 1	J2-538	MC118	30-Oct-10	Q5A	Paramuricea LII-10-599	X		X		X		WHOI-PSU	Shank-Fisher	1:54:00	28.855669	-88.493631	887		subsample for genetics; subsample to CF for isotopes; whole body in 5% formalin for 8 hours and transfer to 70% Ethanol
3364	Anemone morph 3	J2-538	MC118	30-Oct-10	Black Slurp	Paramuricea LII-10-600	X				X		WHOI-PSU	Shank-Fisher	0:45:47	28.856010	-88.493622	889		subsample to CF for isotopes
3367	Caridean shrimp	J2-538	MC118	30-Oct-10	Biobox Stbd	rock or Chrysogorgia			X			TS	WHOI	Shank	4:32:54	28.852589	-88.492672	883	X	1 gravid/1 not
3368	Acesta sp.	J2-538	MC118	30-Oct-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	0:29:08	28.856028	-88.493609	889	X	subsample gill and mantle; subsample to CF for isotopes; rest to NRDA: GU2888-A1029-T-E9-07
3369	Echinus sp.	J2-538	MC118	30-Oct-10	Q14		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank	6:18:10	28.852631	-88.491867	884	X	subsample for genetics; subsample to CF for isotopes; subsample to CM; rest to NRDA: GU2888-A1030-T-E9-01
3370	Caridean shrimp	J2-538	MC118	30-Oct-10	Red Slurp				X			TS	WHOI	Shank	1:45:36	28.855629	-88.493665	887		
3371	dead Madrepora with zoanthids	J2-538	MC118	30-Oct-10	Q13		X					NRDA	WHOI-NRDA	Shank	2:11:17	28.855655	-88.493524	884	X	subsample to Shank; rest to NRDA: GU2888-A1039-T-E9-08
4207	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC3							NRDA	USGS-NRDA	Demopoulos	10:24:03	28.852688	-88.492671	883		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4208	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC3							AD	USGS	Demopoulos	10:24:03	28.852688	-88.492671	883		
4209	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC3							AD	USGS	Demopoulos	10:24:03	28.852688	-88.492671	883		
4210	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC1							AD	USGS	Demopoulos	12:09:26	28.852714	-88.492546	884		
4211	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC1							AD	USGS	Demopoulos	12:09:26	28.852714	-88.492546	884		
4212	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC1							AD	USGS	Demopoulos	12:09:26	28.852714	-88.492546	884		
4213	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC2							AD	USGS	Demopoulos	11:58:51	28.852702	-88.492603	884		
4214	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC2							AD	USGS	Demopoulos	11:58:51	28.852702	-88.492603	884		
4215	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC2							AD	USGS	Demopoulos	11:58:51	28.852702	-88.492603	884		
4216	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC4							AD	USGS	Demopoulos	10:26:08	28.852676	-88.492676	883		
4217	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC4							AD	USGS	Demopoulos	10:26:08	28.852676	-88.492676	883		
4218	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC4							AD	USGS	Demopoulos	10:26:08	28.852676	-88.492676	883		
4219	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC5							AD	USGS	Demopoulos	12:11:15	28.852705	-88.492551	884		
4220	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC5							AD	USGS	Demopoulos	12:11:15	28.852705	-88.492551	884		
4221	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC5							AD	USGS	Demopoulos	12:11:15	28.852705	-88.492551	884		
4222	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC6							AD	USGS	Demopoulos	10:27:26	28.852675	-88.492679	883		
4223	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC6							AD	USGS	Demopoulos	10:27:26	28.852675	-88.492679	883		
4224	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC6							AD	USGS	Demopoulos	10:27:26	28.852675	-88.492679	883		
4228	Sediment (0-2 cm)	J2-538	MC118	30-Oct-10	PC8							AD	USGS	Demopoulos	10:30:20	28.852684	-88.492685	883		
4229	Sediment (2-5 cm)	J2-538	MC118	30-Oct-10	PC8							AD	USGS	Demopoulos	10:30:20	28.852684	-88.492685	883		
4230	Sediment (5-10 cm)	J2-538	MC118	30-Oct-10	PC8							AD	USGS	Demopoulos	10:30:20	28.852684	-88.492685	883		
4279	Mussel Pot Subsample	J2-538	MC118	30-Oct-10	MPF							AD	USGS	Demopoulos	10:43:31	28.852751	-88.492624	883		
6021	rock	J2-538	MC118	30-Oct-10	rock box							DF	LSU	Roberts	23:18:40	28.856902	-88.494379	881		
6022	rock	J2-538	MC118	30-Oct-10	rock box							DF	LSU	Roberts	2:41:53	28.855545	-88.493488	881		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
126	water	J2-539	DC673	31-Oct-10	Niskin A								Temple	Cordes	23:17:08	28.310203	-87.310887	2,597		
127	water	J2-539	DC673	31-Oct-10	Niskin B								Temple	Cordes	1:29:28	28.309832	-87.310468	2,595		
128	water	J2-539	DC673	31-Oct-10	Niskin C								Temple	Cordes	3:12:01	28.310177	-87.309028	2,574		
129	water	J2-539	DC673	31-Oct-10	Niskin E								Temple	Cordes	4:28:44	28.011140	-87.306497	2,388		
130	water	J2-539	DC673	31-Oct-10	Niskin G								Temple	Cordes	11:53:51	28.314532	-87.297948	2,002		
601	Paramuricea F	J2-539	DC673	31-Oct-10	Biobox port		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	5:52:09	28.310509	-87.307355	2,400		
602	Corallium	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	8:53:46	28.312021	-87.303222	2,229		
603	Isididae	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	6:07:37	28.310409	-87.307240	2,398		
604	Bathypathes?	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			DR	PSU	Baums	5:07:59	28.310634	-87.307289	2,382		
605	Paramuricea F	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	5:57:02	28.310500	-87.307349	2,399		
606	Anthomastus?	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	6:34:56	28.310417	-87.307231	2,398		
607	Paramuricea F	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	6:19:34	28.310491	-87.307303	2,377		large colony
608	Paramuricea F	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	5:24:22	28.310544	-87.307354	2,386		small colony
609	Chrysogorgia	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	5:42:41	28.310507	-87.307363	2,383		
610	Lepidisis	J2-539	DC673	31-Oct-10	Q16A		X	X	X			AQ	Temple	Cordes	3:44:37	28.310587	-87.307753	2,443		
611	Paramuricea F	J2-539	DC673	31-Oct-10	Q18C		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	7:17:07	28.310948	-87.306532	2,313		
612	Isididae	J2-539	DC673	31-Oct-10	Q18C		X	X	X			AQ	Temple	Cordes	9:51:52	28.311908	-87.302932	2,203		Keratoisis sp.?
613	Paramuricea F	J2-539	DC673	31-Oct-10	Q18B		X	X	X			AQ	Temple	Cordes	7:17:07	28.310948	-87.306532	2,313		
614	Isididae	J2-539	DC673	31-Oct-10	Q18C		X	X	X			AQ	Temple	Cordes	9:51:52	28.311908	-87.302932	2,203		
615	Isididae	J2-539	DC673	31-Oct-10	Q16B		X	X	X			AQ	Temple	Cordes	8:47:15	28.312034	-87.303238	2,229		
616	Iridogorgia magnispiralis	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	8:38:16	28.312083	-87.303302	2,229		
617	Iridogorgia splendens	J2-539	DC673	31-Oct-10	Blue Chamber A/B		X	X	X			AQ	Temple	Cordes	9:11:12	28.311937	-87.303119	2,229		
618	Chrysogorgia	J2-539	DC673	31-Oct-10	Biobox port		X	X	X			AQ	Temple	Cordes	5:41:37	28.310507	-87.307358	2,377		large white polyps on base
619	Corallium	J2-539	DC673	31-Oct-10	Q17B		X	X	X			AQ	Temple	Cordes	6:27:57	28.310463	-87.307288	2,400		
620	Bathypathes?	J2-539	DC673	31-Oct-10	Blue Chamber C		X	X	X			DR	PSU	Baums	10:39:46	28.312747	-87.300464	2,160		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
621	Paramuricea F	J2-539	DC673	31-Oct-10	Blue Chamber C		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:29:03	28.311913	-87.302976	2,207		
622	Paramuricea F	J2-539	DC673	31-Oct-10	Blue Chamber C		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	10:41:02	28.312747	-87.300463	2,160		
623	Bamboo	J2-539	DC673	31-Oct-10	NA		X	X	X			AQ	Temple	Cordes	NA	NA	NA	NA		
624	Zoarcid	J2-539	DC673	31-Oct-10	Black Slurp				X			AQ	Temple	Cordes	2:41:54	28.310009	-87.309488	2,576		P Sulaki?
625	Sibogagorgia	J2-539	DC673	31-Oct-10	Q17B		X	X	X			AQ	Temple	Cordes	4:26:36	28.310730	-87.307577	2,390		
626	Paramuricea F	J2-539	DC673	31-Oct-10	Q17A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	4:11:15	28.310666	-87.307707	2,398		
627	Paramuricea F	J2-539	DC673	31-Oct-10	Blue Chamber A/B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	9:57:09	28.311909	-87.302915	2,203		black
628	Paragorgia	J2-539	DC673	31-Oct-10	Blue Chamber A/B		X	X	X			AQ	Temple	Cordes	9:28:25	28.311913	-87.302976	2,207		
629	Octocoral-Purple	J2-539	DC673	31-Oct-10	Blue Chamber A/B		X	X	X			AQ	Temple	Cordes	9:39:28	28.311912	-87.302972	2,207		
630	Bathypathes?	J2-539	DC673	31-Oct-10	Q18A		X		X			DR	PSU	Baums	23:10:42	28.299007	-87.316900	2,600		
631	Isididae	J2-539	DC673	31-Oct-10	Q18B		X	X	X			AQ	Temple	Cordes	4:41:33	28.310584	-87.307281	2,383		
632	Paramuricea F	J2-539	DC673	31-Oct-10	Q18B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	6:39:29	28.310417	-87.307229	2,372		
1142	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1143					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1142	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1143					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1142	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1143	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1142	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1143	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1143	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1142					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1143	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1142	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1144	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1144	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1144	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1144	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1145	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1146					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1145	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1146					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1145	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1146	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1145	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1146	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1146	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1145					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1146	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1145	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1147	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1148					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1147	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1148					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1147	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1148	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1147	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1148	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1148	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1147					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1148	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1147	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1149	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1150					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1149	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1150					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1149	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1150	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1149	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1150	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1150	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1149					X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1150	Polynoidae	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1149	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1151	Bathymodiolus sp.	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1152						CF	PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1151	Bathymodiolus sp.	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1152						CF	PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1151	Bathymodiolus sp. Adducter	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1152	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1151	Bathymodiolus sp. Adductor	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1152	X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1152	Polynoid in small mussel	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1151						CF	PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1153	Polynoid in big mussel	J2-539	DC673	31-Oct-10	Biobox Stbd	LII-10-1151						CF	PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1154	Lamillibrachia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1154	Lamillibrachia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1154	Lamillibrachia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1155	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1155	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1155	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1156	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1156	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1156	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1157	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1157	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

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1157	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1158	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1158	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1158	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1159	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1159	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1159	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1160	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1160	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1160	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1161	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1161	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1161	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1162	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1162	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1162	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1163	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1163	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1164	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1164	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1165	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1165	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1166	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1166	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1167	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1167	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1168	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1168	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1169	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1169	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1170	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1170	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1171	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1171	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1172	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1172	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1173	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1173	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1174	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1174	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1175	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1175	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1176	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1176	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1177	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1177	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1178	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1178	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1179	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1179	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1180	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1180	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1181	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1181	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1182	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1182	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1183	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1183	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1184	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1184	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1185	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1185	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1186	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1186	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1187	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1187	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1188	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1188	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1189	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1189	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1190	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1190	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1191	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1191	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1192	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1192	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1193	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1193	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1194	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1194	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1195	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1195	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1196	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1196	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1197	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1197	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1198	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1198	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1199	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1199	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1200	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1200	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1201	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1201	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1202	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1202	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1203	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1203	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1204	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1204	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1205	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1205	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1206	Escarpia sp. (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1206	Escarpia sp. (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1207	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1207	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1207	Lamillibrachia (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1208	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1208	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1208	Lamillibrachia (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1209	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1209	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1209	Lamillibrachia (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1210	Ophiuroids	J2-539	DC673	31-Oct-10	Biobox Stbd							CF	PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1211	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd						X		PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1211	Lamillibrachia (vest)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1211	Lamillibrachia (troph.)	J2-539	DC673	31-Oct-10	Biobox Stbd		X						PSU	Fisher	0:05:41	28.310050	-87.310720	2,604		
1212	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Black Slurp							CF	PSU	Fisher	2:40:29	28.310144	-87.309334	2,578		
1213	Polynoid	J2-539	DC673	31-Oct-10	Black Slurp							CF	PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1214	Limpit	J2-539	DC673	31-Oct-10	Black Slurp							CF	PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1215	Polynoid Assorted	J2-539	DC673	31-Oct-10	Green Slurp							CF	PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1217	Shrimp	J2-539	DC673	31-Oct-10	Green Slurp							CF	PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1218	Assorted Worms	J2-539	DC673	31-Oct-10	Green Slurp							CF	PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1219	Amphipod	J2-539	DC673	31-Oct-10	Green Slurp							CF	PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1220	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1221					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1220	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1221					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1220	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1221	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1220	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1221	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1221	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1220					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1221	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1220	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1222	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1223					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1222	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1223					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1222	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1223	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1222	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1223	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1223	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1222					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1223	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1222	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1224	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1225	Anemone on Escarpia	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1226	Anemone on Escarpia	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1227	Polychaete	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1228	Anemone?	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1229	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1230					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1229	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1230					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1229	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1230	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1229	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1230	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1230	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1229					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1230	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1229	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1231	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1232					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1231	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1232					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1231	Bathymodiolus (gill)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1232	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1231	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1232	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1232	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1231					X		PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1232	Polynoid	J2-539	DC673	31-Oct-10	Green Slurp	LII-10-1231	X						PSU	Fisher	1:09:16	28.309961	-87.310630	2,599		
1233	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1234					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1233	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1234					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1233	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1234	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1233	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1234	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1234	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1233					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1234	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1233	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1237	Ophiuroid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1238	Ophiuroid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1241	Limpets	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1242	A. muricola	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1243	Polynoid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1244	Polynoid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1245	Snail	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1246	Polynoid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1247	A. muricola	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1248	Limpets	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1249	Snail	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1250	Ophiuroid	J2-539	DC673	31-Oct-10	Black Slurp						X		PSU	Fisher	2:43:22	28.310129	-87.309309	2,578		
1254	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1255					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1254	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1255					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1254	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1255	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1254	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1255	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1255	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1254					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1255	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1254	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1256	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1257					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1256	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1257					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1256	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1257	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1256	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1257	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1257	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1256					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1257	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1256	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1258	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1258	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1258	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1258	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1259	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1260					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1259	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1260	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1260	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1260	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1260	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1260	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1261	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1261	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1260					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1261	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1260	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1262	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1263					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1262	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1263					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1262	Bathymodiolus sp. (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1263	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1262	Bathymodiolus sp. (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1263	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1263	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1262					X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1263	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1262	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1264	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1265	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1264	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1265	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1265	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1264	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1266	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1267	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1266	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1267	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1267	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1266	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1268	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1269	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1268	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1269	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1269	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1268	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1270	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1271	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1270	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1271	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1271	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1270	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1272	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1273	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1272	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1273	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1273	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1272	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1274	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1275	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1274	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1275	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1275	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1274	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1276	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1277	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1276	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1277	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1277	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1276	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1278	Anemone on Escarpia	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1279	Anemone on Escarpia	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1280	Ophiuroids	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1281	Ophiuroids	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1282	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1282	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1283	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1284	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1284	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1284	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1285	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1285	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1285	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1286	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1286	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1286	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1287	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1287	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1288	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1288	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1289	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1289	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1289	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1290	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1290	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1290	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1291	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port						X		PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1291	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1291	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1292	Escarpia (Vest)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1292	Escarpia (Troph)	J2-539	DC673	31-Oct-10	Biobox Port		X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1293	Escarpia	J2-539	DC673	31-Oct-10	Biobox Port							CF	PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1294	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1295	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1294	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1295	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1295	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1294	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1296	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1297	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1296	Bathymodiolus (mantle)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1297	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1297	Bathymodiolus (gills)	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1297	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1298	Polynoid	J2-539	DC673	31-Oct-10	Biobox Port	LII-10-1298	X						PSU	Fisher	2:52:06	28.310098	-87.309213	2,578		
1299	Seacucumber	J2-539	DC673	31-Oct-10	Red Slurp						X		PSU	Fisher	1:14:33	28.309936	-87.310642	2,599		
1300	Seacucumber	J2-539	DC673	31-Oct-10	Red Slurp						X		PSU	Fisher	1:14:33	28.309936	-87.310642	2,599		
1357	Seacucumber	J2-539	DC673	31-Oct-10	Red Slurp							CF	PSU	Fisher	1:14:33	28.309936	-87.310642	2,599		
2147	Munidopsis white	J2-539	DC673	31-Oct-10	Red Slurp			X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	1:14:33	28.309936	-87.310642	2,599	X	
2148	Munidopsis white	J2-539	DC673	31-Oct-10	Red Slurp			X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	1:14:33	28.309936	-87.310642	2,599	X	
2149	Munidopsis white	J2-539	DC673	31-Oct-10	Black Slurp			X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	2:43:22	28.310129	-87.309309	2,578		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
2150	Munidopsis white	J2-539	DC673	31-Oct-10	Black Slurp			X	X		X	CM-MN	USGS-PSU	Morrison-Fisher	2:43:22	28.310129	-87.309309	2,578		
2151	Munidopsis white	J2-539	DC673	31-Oct-10	Green Slurp			X			X	CM-MN	USGS-PSU	Morrison-Fisher	1:09:16	28.309961	-87.310630	2,599		
3372	Asteroschema clavigerum?	J2-539	DC673	31-Oct-10	Biobox Port	Paramuricea F LII-10-601	X		X		X	TS	WHOI-PSU	Shank-Fisher	5:52:09	28.310509	-87.307355	2,400	X	subsample to CF for isotopes
3373	Anemone small pink	J2-539	DC673	31-Oct-10	Biobox Port	Bamboo coral LII-10-603	X						WHOI	Shank	6:07:37	28.310409	-87.307240	2,398		
3374	Barnacle morph 3	J2-539	DC673	31-Oct-10	Biobox Port	Paramuricea LII-10-607	X						WHOI	Shank	6:19:34	28.310491	-87.307303	2,377		
3375	Asteroschema clavigerum	J2-539	DC673	31-Oct-10	Q18C	Paramuricea LII-10-611	X				X		WHOI-PSU	Shank-Fisher	7:17:07	28.310948	-87.306532	2,313	X	subsample to CF for isotopes
3376	Barnacle Glyptelasma	J2-539	DC673	31-Oct-10	Biobox Port	Corallium LII-10-619	X		X				WHOI	Shank	8:53:46	28.312021	-87.303222	2,229		Voucher
3377	Hydroids	J2-539	DC673	31-Oct-10	Biobox Port	Corallium LII-10-619	X						WHOI	Shank	8:53:46	28.312021	-87.303222	2,229		
3378	Asteroschema clavigerum?	J2-539	DC673	31-Oct-10	Blue Chamber C	Paramuricea LII-10-622	X				X		WHOI-PSU	Shank-Fisher	10:41:02	28.312747	-87.300463	2,160		subsample to CF for isotopes; cut in half and sampled at 10:41
3379	Asteroschema clavigerum?	J2-539	DC673	31-Oct-10	Blue Chamber C	Paramuricea LII-10-621	X		X			TS	WHOI	Shank	9:29:03	28.311913	-87.302976	2,207	X	Voucher
3380	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp				X			TS	WHOI	Shank	1:14:33	28.309786	-87.310532	2,599	X	Voucher
3381	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp				X			TS	WHOI	Shank	1:14:33	28.309786	-87.310532	2,599	X	Voucher
3382	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp				X			TS	WHOI	Shank	1:14:33	28.309786	-87.310532	2,599	X	Voucher
3383	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3384	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3385	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3386	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3387	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3388	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3389	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3390	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3391	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3392	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3393	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3394	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3395	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3397	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3398	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3399	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3400	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3401	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3402	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3403	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3404	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X				X		WHOI-PSU	Shank-Fisher	1:14:33	28.309786	-87.310532	2,599	X	subsample to CF for isotopes
3405	Alvinocaris muricola	J2-539	DC673	31-Oct-10	Red Slurp		X						WHOI	Shank	1:14:33	28.309786	-87.310532	2,599	X	
3406	Asteroschema clavigerum	J2-539	DC673	31-Oct-10	Q17A	Paramuricea LII-10-626	X				X		WHOI-PSU	Shank-Fisher	4:11:15	28.310666	-87.307707	2,398		subsample to CF for isotopes
3407	Asteroschema clavigerum	J2-539	DC673	31-Oct-10	Blue Chamber	Paramuricea LII-10-627	X				X		WHOI-PSU	Shank-Fisher	9:57:09	28.311909	-87.302915	2,203		subsample to CF for isotopes
3408	A. muricola	J2-539	DC673	31-Oct-10	Black Slurp		X		X			TS	WHOI	Shank	2:41:54	28.310009	-87.309488	2,576	X	Voucher
3409	Polynoid	J2-539	DC673	31-Oct-10	Q18A	Bathypathes? LII-10-630			X			TS	WHOI	Shank	23:10:42	28.299007	-87.316900	2,600	X	Voucher
3410	Asteroschema clavigerum	J2-539	DC673	31-Oct-10	Q18B	Paramuricea LII-10-632	X				X		WHOI-PSU	Shank-Fisher	6:39:29	28.310417	-87.307229	2,372		subsample to CF for isotopes
3411	A. muricola	J2-539	DC673	31-Oct-10	Orange Slurp flush		X						WHOI	Shank	NA	NA	NA	NA		
3412	Ophiactis	J2-539	DC673	31-Oct-10	Black Slurp	mussels	X						WHOI	Shank	2:41:54	28.310009	-87.309488	2,576		
3413	A. muricola	J2-539	DC673	31-Oct-10	Green Slurp		X						WHOI	Shank	1:09:16	28.309790	-87.310530	2,599		
4237	Sediment (0-2 cm)	J2-539	DC673	31-Oct-10	PC6							AD	USGS	Demopoulos	0:43:39	28.309859	-87.310696	2,601		
4238	Sediment (2-5 cm)	J2-539	DC673	31-Oct-10	PC6							AD	USGS	Demopoulos	0:43:39	28.309859	-87.310696	2,601		
4239	Sediment (5-10 cm)	J2-539	DC673	31-Oct-10	PC6							AD	USGS	Demopoulos	0:43:39	28.309859	-87.310696	2,601		
4240	Sediment (0-2 cm)	J2-539	DC673	31-Oct-10	PC7							AD	USGS	Demopoulos	0:41:07	28.309860	-87.310695	2,601		
4241	Sediment (2-5 cm)	J2-539	DC673	31-Oct-10	PC7							AD	USGS	Demopoulos	0:41:07	28.309860	-87.310695	2,601		
4242	Sediment (5-10 cm)	J2-539	DC673	31-Oct-10	PC7							AD	USGS	Demopoulos	0:41:07	28.309860	-87.310695	2,601		
4243	Sediment (0-2 cm)	J2-539	DC673	31-Oct-10	PC10							AD	USGS	Demopoulos	0:38:21	28.309859	-87.310694	2,601		
4244	Sediment (2-5 cm)	J2-539	DC673	31-Oct-10	PC10							AD	USGS	Demopoulos	0:38:21	28.309859	-87.310694	2,601		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4245	Sediment (5-10 cm)	J2-539	DC673	31-Oct-10	PC10							AD	USGS	Demopoulos	0:38:21	28.309859	-87.310694	2,601		
5020	Methane20	J2-539	DC673	31-Oct-10	Niskin B							BD	FSU	McDonald	1:29:28	28.309832	-87.310468	2,595		
6023	rock	J2-539	DC673	31-Oct-10	rock box							DF	LSU	Roberts	0:24:35	28.309992	-87.310757	2,602		
6024	rock	J2-539	DC673	31-Oct-10	rock box							DF	LSU	Roberts	0:51:53	28.309989	-87.310714	2,598		
6025	rock	J2-539	DC673	31-Oct-10	rock box							DF	LSU	Roberts	1:33:59	28.309946	-87.310522	2,594		
6026	rock	J2-539	DC673	31-Oct-10	rock box							DF	LSU	Roberts	10:47:53	28.312771	-87.300521	2,158		
131	water	RB-10-07_009	VK826	31-Oct-10	Niskin 12								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
132	water	RB-10-07_009	VK826	31-Oct-10	Niskin 11								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
133	water	RB-10-07_009	VK826	31-Oct-10	Niskin 10								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
134	water	RB-10-07_009	VK826	31-Oct-10	Niskin 9								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
135	water	RB-10-07_009	VK826	31-Oct-10	Niskin 8								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
136	water	RB-10-07_009	VK826	31-Oct-10	Niskin 7								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
137	water	RB-10-07_009	VK826	31-Oct-10	Niskin 6								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
138	water	RB-10-07_009	VK826	31-Oct-10	Niskin 5								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
139	water	RB-10-07_009	VK826	31-Oct-10	Niskin 4								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
140	water	RB-10-07_009	VK826	31-Oct-10	Niskin 3								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
141	water	RB-10-07_009	VK826	31-Oct-10	Niskin 2								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
142	water	RB-10-07_009	VK826	31-Oct-10	Niskin 1								Temple	Cordes	18:57:57	29.155833	-88.015000	NA		
640	Callogorgia	J2-540	VK826	1-Nov-10	Red Chamber and Q10		X	X			X	AQ	Temple-PSU	Cordes-Fisher	23:55:42	29.154826	-88.022413	540		
641	Sibopathes ?	J2-540	VK826	1-Nov-10	Q3B		X	X	X			DR	PSU	Baums	12:24:06	29.161385	-88.015773	451	X	
642	Leiopathes	J2-540	VK826	1-Nov-10	Q3A		X	X	X			DR	PSU	Baums	10:38:07	29.162094	-88.015245	454	X	pink on surface; white
643	Leiopathes	J2-540	VK826	1-Nov-10	Q2B		X	X	X			DR	PSU	Baums	10:07:37	29.162164	-88.015314	452	X	red
644	Leiopathes	J2-540	VK826	1-Nov-10	Q2C		X	X	X			DR	PSU	Baums	12:45:53	29.160946	-88.015907	450	X	white
645	Leiopathes	J2-540	VK826	1-Nov-10	Q2A		X	X	X			DR	PSU	Baums	9:56:26	29.162202	-88.015305	453	X	red

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
646	Leiopathes	J2-540	VK826	1-Nov-10	Q1A		X	X	X			DR	PSU	Baums	8:14:45	29.163400	-88.011811	464	X	pink on surface; white
647	Sibopathes ?	J2-540	VK826	1-Nov-10	Q1B		X	X	X			DR	PSU	Baums	9:05:40	29.163349	-88.011216	455	X	white
648	Leiopathes	J2-540	VK826	1-Nov-10	Q1C		X	X	X			DR	PSU	Baums	12:53:30	29.160898	-88.015893	450	X	pink on surface; disease? In polyps; white
649	Leiopathes	J2-540	VK826	1-Nov-10	Q4C		X	X	X			DR	PSU	Baums	13:24:03	29.160767	-88.015639	451	X	white
650	Leiopathes	J2-540	VK826	1-Nov-10	Q4B		X	X	X			DR	PSU	Baums	13:09:36	29.160906	-88.015825	450	X	salmon
651	Leiopathes	J2-540	VK826	1-Nov-10	Q4A		X	X	X			DR	PSU	Baums	13:02:22	29.160908	-88.015828	450	X	salmon
652	Leiopathes	J2-540	VK826	1-Nov-10	Q5B		X	X	X			DR	PSU	Baums	15:26:59	29.158061	-88.014854	478	X	white
653	Leiopathes	J2-540	VK826	1-Nov-10	Q5A		X	X	X			DR	PSU	Baums	11:05:23	29.161977	-88.015402	454	X	white
654	Leiopathes	J2-540	VK826	1-Nov-10	Q6C		X	X	X			DR	PSU	Baums	15:01:29	29.158075	-88.014871	475	X	small polyps; white
655	Leiopathes	J2-540	VK826	1-Nov-10	Q6A/B		X	X	X			DR	PSU	Baums	13:33or14:54	29.160000	-88.015000	450-475	X	large polyps; few branches; white
656	Leiopathes	J2-540	VK826	1-Nov-10	Q6A/B		X	X	X			DR	PSU	Baums	13:33or14:54	29.160000	-88.015000	450-475	X	small polyps; ver branched; white
657	Leiopathes	J2-540	VK826	1-Nov-10	Q9B (1)		X	X	X			DR	PSU	Baums	17:04:27	29.158085	-88.015088	473	X	3 pieces small; white
658	Leiopathes	J2-540	VK826	1-Nov-10	Q9B (2)		X	X	X			DR	PSU	Baums	17:04:27	29.158085	-88.015088	473	X	Y pattern in main stem ; white
659	Leiopathes	J2-540	VK826	1-Nov-10	Q9A		X	X	X			DR	PSU	Baums	16:40:00	29.158024	-88.014874	475	X	white
660	Leiopathes	J2-540	VK826	1-Nov-10	Q8B		X	X	X			DR	PSU	Baums	15:37:17	29.158124	-88.014924	476	X	white
661	Leiopathes	J2-540	VK826	1-Nov-10	Q8A		X	X	X			DR	PSU	Baums	15:18:03	29.158045	-88.014850	478	X	white
662	Leiopathes	J2-540	VK826	1-Nov-10	Q11A		X	X	X			DR	PSU	Baums	18:28:00	29.157397	-88.015343	474	X	white
663	Leiopathes	J2-540	VK826	1-Nov-10	Q7A (1)		X	X	X			DR	PSU	Baums	17:27:00	29.157805	-88.015363	548	X	white
664	Leiopathes	J2-540	VK826	1-Nov-10	Q7A (2)		X	X	X			DR	PSU	Baums	17:54:00	NA	NA	472	X	not recorded in virtual van; white
665	Leiopathes	J2-540	VK826	1-Nov-10	Q7A (3)		X	X	X			DR	PSU	Baums	17:58:00	29.157630	-88.015332	472	X	white
666	Leiopathes	J2-540	VK826	1-Nov-10	Q7B		X	X	X			DR	PSU	Baums	18:15:39	29.157436	-88.015371	474	X	white
667	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X			DR	PSU	Baums	NA	29.160000	-88.015000	450-		live/ LF1301;

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
																		475		red
668	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X			DR	PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1302; white
669	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1303; pink
670	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1304; pink
671	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1305; white
672	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1306; same colony that LII-10-673; white
673	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1307; same colony that LII-10-672; orange
674	Leiopathes	J2-540	VK826	1-Nov-10	Biobox Stbd		X	X	X				PSU	Baums	NA	29.160000	-88.015000	450-475		live/ LF1308; salmon
675	Leiopathes	J2-540	VK826	1-Nov-10	Red Chamber		X	X	X				PSU	Baums	18:42:00	29.157397	-88.015317	475		salmon
676	Leiopathes	J2-540	VK826	1-Nov-10	Blender (1)		X	X	X			DR	PSU	Baums	16:17:00	29.158053	-88.014913	475		2 pieces; white
677	Leiopathes	J2-540	VK826	1-Nov-10	Blender (2)		X	X	X			DR	PSU	Baums	15:51:00	29.158041	-88.014901	476		white
2152	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q17	LII-10-2152		X				JL	Temple	Cordes	20:32:15	29.158765	-88.010368	479		
2152	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q17			X	X	X		CM-JL	USGS-Temple	Morrison-Cordes	20:32:15	29.158765	-88.010368	479		
2153	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q18	LII-10-2153		X				JL	Temple	Cordes	20:16:39	29.158752	-88.010353	479		
2153	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q18			X	X	X		CM-JL	USGS-Temple	Morrison-Cordes	20:16:39	29.158752	-88.010353	479		
2154	Eumunida picta juvenile	J2-540	VK826	1-Nov-10	Blue Slurp			X				CM-MN	USGS	Morrison	11:08-11:28	28.193460	-89.798600	441		
2155	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q16	LII-10-2155		X				JL	Temple	Cordes	21:49:53	29.159172	-88.010576	477		
2155	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q16			X	X	X		CM-JL-SB	USGS-Temple-MCBI	Morrison-Cordes-Brooke	21:49:53	29.159172	-88.010576	477		
2156	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q3A	LII-10-2156		X				JL	Temple	Cordes	10:33:18	29.162094	-88.015260	454		
2156	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q3A			X	X	X		CM	USGS	Morrison	10:33:18	29.162094	-88.015260	454		

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2157	Rochinia tanneri?	J2-540	VK826	1-Nov-10	Q3B	Sibopathes		X				TS	USGS-WHOI	Morrison-Shank	12:24:06	29.161385	-88.015773	451		
2158	Echinus tylodes	J2-540	VK826	1-Nov-10	Biobox Stbd			X				NRDA	USGS-NRDA	Morrison	NA	29.160000	-88.015000	450-475		
2159	Echinus tylodes	J2-540	VK826	1-Nov-10	Biobox Stbd			X				NRDA	USGS-NRDA	Morrison	NA	29.160000	-88.015000	450-475		
2160	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q8A			X	X	X		CM	USGS	Morrison	15:18:03	29.158045	-88.014850	478		
2161	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber A	LII-10-2161		X				JL	Temple	Cordes	21:10:19	29.158718	-88.010593	478		coenosarc
2161	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber A				X			CM-JL	USGS-Temple	Morrison-Cordes	21:10:19	29.158718	-88.010593	478		
2162	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber B	LII-10-2162		X				JL	Temple	Cordes	21:29:15	29.158947	-88.010351	477		
2162	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber B	LII-10-2162		X				JL	Temple	Cordes	21:29:15	29.158947	-88.010351	477		
2162	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber B	LII-10-2162		X				JL	Temple	Cordes	21:29:15	29.158947	-88.010351	477		
2162	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber B	LII-10-2162		X				JL	Temple	Cordes	21:29:15	29.158947	-88.010351	477		coenosarc
2162	Lophelia pertusa	J2-540	VK826	1-Nov-10	Red Chamber B				X			CM-JL	USGS-Temple	Morrison-Cordes	21:29:15	29.158947	-88.010351	477		
2163	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q5A			X	X	X		CM	USGS	Morrison	11:05:23	29.161977	-88.015402	454		
2164	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q11B			X	X	X		CM-SB	USGS-MCBI	Morrison-Brooke	18:37:31	29.157397	-88.015343	475		
2165	Lophelia pertusa	J2-540	VK826	1-Nov-10	Q1A			X				CM	USGS	Morrison	8:14:45	29.163400	-88.011811	464		
2175	Munidopsis	J2-540	VK826	1-Nov-10	Black/BlueSlurp				X		X	CM- MN	USGS-PSU	Morrison-Fisher	20:40-22:25	29.159000	-88.011000	479		
2176	Munidopsis	J2-540	VK826	1-Nov-10	Black/BlueSlurp				X			CM- MN	USGS	Morrison	20:40-22:25	29.159000	-88.011000	479		
2177	Munidopsis	J2-540	VK826	1-Nov-10	Black/BlueSlurp				X			CM- MN	USGS	Morrison	20:40-22:25	29.159000	-88.011000	479		
2178	Munidopsis	J2-540	VK826	1-Nov-10	Black/BlueSlurp				X			CM- MN	USGS	Morrison	20:40-22:25	29.159000	-88.011000	479		
2179	Munidopsis	J2-540	VK826	1-Nov-10	Black/BlueSlurp				X			CM- MN	USGS	Morrison	20:40-22:25	29.159000	-88.011000	479		
2180	Eumunida picta	J2-540	VK826	1-Nov-10	Blue Slurp				X			CM- MN	USGS	Morrison	22:26:20	29.159263	-88.010576	478		Maybe from black slurp

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3417	Asteroschema sp. 1	J2-540	VK826	1-Nov-10	Red Chamber	Callogorgia LII-10-640		X					WHOI	Shank	23:55:42	29.154826	-88.022413	540		Soak in RNALater at 4C O/N and then freeze at -80C
3422	Rochinia	J2-540	VK826	1-Nov-10	Q3B	Sibopathes LII-10-641	X					TS	WHOI-USGS	Shank	12:24:06	29.161385	-88.015773	451		subsample to CM
3423	snail morph 2	J2-540	VK826	1-Nov-10	Q3A	Lophelia LII-10-2156	X						WHOI	Shank	10:33:18	29.162094	-88.015260	454		
3424	shrimp post-larvae	J2-540	VK826	1-Nov-10	Black Slurp	Lophelia	X		X			X	WHOI	Shank	20:39:55	29.158763	-88.010378	479	X	Voucher
3425	Echinus tylodes	J2-540	VK826	1-Nov-10	Biobox Port		X					NRDA	WHOI-USGS-NRDA	Shank	20:52:12	29.158768	-88.010372	479	X	subsample to CM and whole to NRDA: CM2158 = GU2988-A1101-T-E9-01; CM2159 = GU2988-A1101-T-E9-02
3426	Astrogomphus	J2-540	VK826	1-Nov-10	Biobox Port	Lophelia	X						WHOI	Shank	NA	NA	NA	NA		
3427	Shrimp gravid	J2-540	VK826	1-Nov-10	Orange Slurp flush	Lophelia			X			TS	WHOI	Shank	NA	NA	NA	NA	X	Voucher; gravid
3432	Tubeworms	J2-540	VK826	1-Nov-10	Blender A			X					WHOI	Shank	9:15:42	29.162970	-88.014923	455		vestimentum and trophosome; soak in RNALater at 4C O/N and then freeze at -80C
3433	Tubeworms	J2-540	VK826	1-Nov-10	Blender A			X					WHOI	Shank	9:15:42	29.162970	-88.014923	455		vestimentum only; soak in RNALater at 4C O/N and then freeze at -80C
3434	mysid/shrimp	J2-540	VK826	1-Nov-10	Blender A			X					WHOI	Shank	9:15:42	29.162970	-88.014923	455		soak in RNALater at 4C O/N and then freeze at -80C
3435	sea slug	J2-540	VK826	1-Nov-10	Biobox Port	Lophelia	X						WHOI-PSU	Shank-Fisher	NA	NA	NA	NA		

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4246	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC1							NRDA	USGS-NRDA	Demopoulos	3:27:46	29.164865	-88.011630	461		
4247	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC1							NRDA	USGS-NRDA	Demopoulos	3:27:46	29.164865	-88.011630	461		
4248	Sediment (5-8 cm)	J2-540	VK826	1-Nov-10	PC1							NRDA	USGS-NRDA	Demopoulos	3:27:46	29.164865	-88.011630	461		
4249	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC4							NRDA	USGS-NRDA	Demopoulos	20:10:30	29.158820	-88.010549	478		
4250	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC4							NRDA	USGS-NRDA	Demopoulos	20:10:30	29.158820	-88.010549	478		
4251	Sediment (5-8 cm)	J2-540	VK826	1-Nov-10	PC4							NRDA	USGS-NRDA	Demopoulos	20:10:30	29.158820	-88.010549	478		
4252	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC5							AD-MB	USGS	Demopoulos	20:07:51	29.158819	-88.010548	478		to molly bik
4253	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC5							AD-MB	USGS	Demopoulos	20:07:51	29.158819	-88.010548	478		to molly bik
4254	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC5							AD-MB	USGS	Demopoulos	20:07:51	29.158819	-88.010548	478		to molly bik
4255	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC2							AD-MB	USGS	Demopoulos	3:31:44	29.164865	-88.011630	461		to molly bik
4256	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC2							AD-MB	USGS	Demopoulos	3:31:44	29.164865	-88.011630	461		to molly bik
4257	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC10							AD	USGS	Demopoulos	3:24:09	29.164865	-88.011630	461		
4258	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC10							AD	USGS	Demopoulos	3:24:09	29.164865	-88.011630	461		
4259	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC10							AD	USGS	Demopoulos	3:24:09	29.164865	-88.011630	461		
4260	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC3							AD	USGS	Demopoulos	3:37:34	29.164865	-88.011630	461		
4261	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC3							AD	USGS	Demopoulos	3:37:34	29.164865	-88.011630	461		
4262	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC3							AD	USGS	Demopoulos	3:37:34	29.164865	-88.011630	461		
4263	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC8							AD	USGS	Demopoulos	3:42:08	29.164865	-88.011630	461		
4264	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC8							AD	USGS	Demopoulos	3:42:08	29.164865	-88.011630	461		
4265	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC8							AD	USGS	Demopoulos	3:42:08	29.164865	-88.011630	461		
4266	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC9							AD	USGS	Demopoulos	19:59:26	29.158817	-88.010546	478		

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4267	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC9							AD	USGS	Demopoulos	19:59:26	29.158817	-88.010546	478		
4268	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC9							AD	USGS	Demopoulos	19:59:26	29.158817	-88.010546	478		
4269	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC7							AD	USGS	Demopoulos	20:02:40	29.158817	-88.010546	478		
4270	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC7							AD	USGS	Demopoulos	20:02:40	29.158817	-88.010546	478		
4271	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC7							AD	USGS	Demopoulos	20:02:40	29.158817	-88.010546	478		
4272	Sediment (0-2 cm)	J2-540	VK826	1-Nov-10	PC6							AD	USGS	Demopoulos	20:05:00	29.158818	-88.010548	478		
4273	Sediment (2-5 cm)	J2-540	VK826	1-Nov-10	PC6							AD	USGS	Demopoulos	20:05:00	29.158818	-88.010548	478		
4274	Sediment (5-10 cm)	J2-540	VK826	1-Nov-10	PC6							AD	USGS	Demopoulos	20:05:00	29.158818	-88.010548	478		
5021	Methane21	J2-540	VK826	1-Nov-10	CTD							BD	FSU	McDonald	NA	NA	NA	NA		
5022	Methane22	J2-540	VK826	1-Nov-10	Niskin H							BD	FSU	McDonald	23:02:01	28.194090	-89.798303	437		
5029	Coral-Live/Dead	J2-540	VK826	1-Nov-10	Biobox Port							BD	FSU	McDonald	NA	NA	NA	NA		
5031	Coral-Live/Dead	J2-540	VK826	1-Nov-10	Biobox Port							BD	FSU	McDonald	NA	NA	NA	NA		
5037	water-DIC	J2-540	VK826	1-Nov-10								BD	FSU	McDonald	NA	NA	NA	NA		
6027	rock	J2-540	VK826	1-Nov-10	rock box							DF	LSU	Roberts	11:54:30	29.162034	-29.162034	454		
633	Callogorgia	J2-540	VK826	2-Nov-10	Q15B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	1:41:37	29.154645	-88.022600	541	X	label says Q17B
634	Callogorgia	J2-540	VK826	2-Nov-10	Q14B		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:52:22	29.154620	-88.022582	543		
635	Callogorgia	J2-540	VK826	2-Nov-10	Q13		X	X	X				Temple-PSU	Cordes-Fisher	0:34:53	29.154607	-88.022549	543		
636	Callogorgia	J2-540	VK826	2-Nov-10	Q14A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	0:42:38	29.154620	-88.022582	543		
637	Callogorgia	J2-540	VK826	2-Nov-10	Q15A		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	1:26:02	29.154654	-88.022595	541		
638	Callogorgia	J2-540	VK826	2-Nov-10	Blue Chamber		X	X				AQ (in RNA Later)	Temple	Cordes	0:00:17	29.154658	-88.022557	541		
639	Callogorgia	J2-540	VK826	2-Nov-10	Blue Chamber		X	X				AQ (in RNA Later)	Temple	Cordes	0:00:24	29.154616	-88.022535	542		

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3414	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q15B	Callogorgia LII-10-633	X	X			X		WHOI-PSU	Shank-Fisher	1:41:37	29.154645	-88.022600	541	X	subsample to CF for isotopes; preserved portion of disc and arm in Shank RNALater and Ambio RNALater
3415	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Blue Chamber	Callogorgia LII-10-639		X					WHOI	Shank	0:17:29	29.154658	-88.022557	541		Soak in RNALater at 4C O/N and then freeze at -80C
3416	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Blue Chamber	Callogorgia LII-10-638		X					WHOI	Shank	0:24:44	29.154616	-88.022535	542		Soak in RNALater at 4C O/N and then freeze at -80C
3418	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q14B	Callogorgia LII-10-634	X		X		X		WHOI-PSU	Shank-Fisher	0:52:22	29.154620	-88.022582	543		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; subsample to CF for isotopes
3419	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q13	Callogorgia LII-10-635	X		X		X		WHOI-PSU	Shank-Fisher	0:34:53	29.154607	-88.022549	543		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; subsample to CF for isotopes
3420	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q14A	Callogorgia LII-10-636	X		X		X		WHOI-PSU	Shank-Fisher	0:42:38	29.154620	-88.022582	543		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; subsample to CF for isotopes

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3421	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q15A	Callogorgia LII-10-637	X		X		X		WHOI-PSU	Shank-Fisher	1:26:02	29.154654	-88.022595	541		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; subsample to CF for isotopes
3428	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q10	Callogorgia LII-10-640	X		X		X		WHOI-PSU	Shank-Fisher	0:01:25	29.154826	-88.022413	540		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; subsample to CF for isotopes
3429	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q10	Callogorgia LII-10-640	X		X				WHOI	Shank	0:01:25	29.154826	-88.022413	540		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH; smaller individual
3430	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q10	Callogorgia LII-10-640	X		X				WHOI	Shank	0:01:25	29.154826	-88.022413	540		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH
3431	Asteroschema sp. 1	J2-540	VK826	2-Nov-10	Q10	Callogorgia LII-10-640	X		X				WHOI	Shank	0:01:25	29.154826	-88.022413	540		preserve in 5% Formalin for 24 hours and then transfer to 70% EtOH
685	Paramuricea	J2-541	MC338	2-Nov-10	Red Chamber		X	X	X			AQ	Temple	Cordes	23:29:27	28.672274	-88.476583	1,370		same colony as Q3 that went to NRDA
686	Paramuricea	J2-541	MC338	2-Nov-10	Blue Chamber		X	X	X			AQ	Temple	Cordes	4:33:02	28.672168	-88.476592	1,371		
1068	Madrepora branch	J2-541	MC338	2-Nov-10	Biobox Stbd	LII-10-1069					X	NRDA	PSU-NRDA	Fisher	20:57:39	28.669505	-88.474476	1,373		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1069	Madrepora branch	J2-541	MC338	2-Nov-10	Biobox Stbd	LII-10-1068	X					NRDA	PSU-NRDA	Fisher	20:57:39	28.669505	-88.474476	1,373		
1070	Unhealthy Ophiuriod Arm	J2-541	MC338	2-Nov-10	Q3	LII-10-1360					X	NRDA	PSU-NRDA	Fisher	23:39:17	28.672260	-88.476568	1,370		
1070	Unhealthy Ophiuriod Arm	J2-541	MC338	2-Nov-10	Q3	LII-10-1070	X					NRDA	PSU-NRDA	Fisher	23:39:17	28.672260	-88.476568	1,370		
1358	Chaceon	J2-541	MC338	2-Nov-10	Biobox Stbd						X	NRDA	PSU-NRDA	Fisher	21:06:10	28.669524	-88.474478	1,374		
1359	Actinoscypha sp.	J2-541	MC338	2-Nov-10	Biobox Stbd						X	NRDA	PSU-NRDA	Fisher	21:07:03	28.669516	-88.474503	1,374		
1359	Actinoscypha sp.	J2-541	MC338	2-Nov-10	Biobox Stbd		X					NRDA	PSU-NRDA	Fisher	21:07:03	28.669516	-88.474503	1,374		
1360	Dead Paramuricid Branch	J2-541	MC338	2-Nov-10	Q3	LII-10-1070					X	NRDA	PSU-NRDA	Fisher	23:39:17	28.672260	-88.476568	1,370		
1360	Dead Paramuricid Branch	J2-541	MC338	2-Nov-10	Q3	LII-10-1070	X					NRDA	PSU-NRDA	Fisher	23:39:17	28.672260	-88.476568	1,370		
2168	Madrepora oculata	J2-541	MC338	2-Nov-10	Q2A	LII-10-2166			X			CM	USGS	Morrison	20:53:27	28.669556	-88.474457	1,374		same colony as #2166
2169	Munida sp. Abdomen	J2-541	MC338	2-Nov-10	Slurp Hose						X		USGS-PSU	Morrison-Fisher	NA	NA	NA	NA		
3436	Madrepora	J2-541	MC338	2-Nov-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher	20:57:39	28.669505	-88.474476	1,373	X	subsample to Shank; to CF; to CM; rest to NRDA: GU2888-A1102-T-E9-01
3437	Chaceon	J2-541	MC338	2-Nov-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	21:06:10	28.669524	-88.474478	1,374	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-02
3438	Actinoscypha sp.	J2-541	MC338	2-Nov-10	Biobox Stbd		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	21:07:03	28.669516	-88.474503	1,374	X	Venus flytrap anemone; subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-03

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3439	Dead Paramuricd	J2-541	MC338	2-Nov-10	Q3		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:39:17	28.672260	-88.476568	1,370	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-04
3440	ophiuroid	J2-541	MC338	2-Nov-10	Q3	TS3439	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	23:39:17	28.672260	-88.476568	1,370	X	A. clavigerum?; subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-05
3456	ophiuroid	J2-541	MC338	2-Nov-10	Q2A		X		X			TS	WHOI	Shank	20:53:27	28.669556	-88.474457	1,374		Voucher
3457	ophiuroid	J2-541	MC338	2-Nov-10	Blue Chamber			X					WHOI	Shank	4:33:02	28.672168	-88.476592	1,371	X	soak in RNALater at 4C O/N and then freeze at -80C; pieces of arm put in 5% formalin
3458	ophiuroid	J2-541	MC338	2-Nov-10	Red Chamber			X					WHOI	Shank	23:29:27	28.672274	-88.476583	1,370		soak in RNALater at 4C O/N and then freeze at -80C; pieces of arm in 5% formalin
4280	Biobox filter	J2-541	MC338	2-Nov-10	Biobox Port							NRDA	USGS-NRDA	Demopoulos	NA	NA	NA	NA		
4281	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC1							NRDA	USGS-NRDA	Demopoulos	15:48:20	28.653156	-88.462868	1,391		
4282	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC2							NRDA	USGS-NRDA	Demopoulos	15:51:05	28.653133	-88.462904	1,391		
4283	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC3							NRDA	USGS-NRDA	Demopoulos	18:24:29	28.661801	-88.467055	1,391		
4284	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC4							NRDA	USGS-NRDA	Demopoulos	18:34:31	28.661775	-88.467091	1,391		
4285	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC5							NRDA	USGS-NRDA	Demopoulos	21:36:20	28.669559	-88.474400	1,374		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
4286	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC6							NRDA	USGS-NRDA	Demopoulos	13:49:40	28.668769	-88.486800	1,460		
4287	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC9							NRDA	USGS-NRDA	Demopoulos	03:05:56	28.672224	-88.476609	1,370		
4288	Sediment (0-5 cm)	J2-541	MC338	2-Nov-10	PC10							NRDA	USGS-NRDA	Demopoulos	2:53:18	28.672287	-88.476583	1,371		
678	Paramuricea	J2-541	MC338	3-Nov-10	Q1A		X	X	X			AQ	Temple	Cordes	0:18:10	28.672467	-88.476553	1,373	X	black on surface; NRDA
679	Anthothela	J2-541	MC338	3-Nov-10	Q1A		X	X	X			AQ	Temple	Cordes	0:01:48	28.672518	-88.476569	1,373		black on surface; NRDA
680	Paramuricea	J2-541	MC338	3-Nov-10	Biobox Stbd		X	X	X			AQ	Temple	Cordes	0:24:44	28.672418	-88.476554	1,373		yellow polyps
681	Swiftia	J2-541	MC338	3-Nov-10	Q4C		X	X	X		X	AQ	Temple-PSU	Cordes-Fisher	5:04:05	28.672193	-88.476532	1,371	X	
682	Paramuricea F?	J2-541	MC338	3-Nov-10	Q4A		X	X	X			AQ	Temple	Cordes	4:24:40	28.672247	-88.476489	1,371	X	
683	Paragorgia	J2-541	MC338	3-Nov-10	Q4A		X	X	X			AQ	Temple	Cordes	3:56:55	28.672275	-88.476471	1,371	X	
684	Paramuricea	J2-541	MC338	3-Nov-10	Biobox Port		X	X	X			AQ	Temple	Cordes	5:36:25	28.672370	-88.476407	1,371	X	black on surface; NRDA
1302	Ophiuriod arm	J2-541	MC338	3-Nov-10	Biobox Stbd						X	NRDA	PSU-NRDA	Fisher	0:24:44	28.672418	-88.476554	1,373		
1302	Ophiuriod arm	J2-541	MC338	3-Nov-10	Biobox Stbd		X					NRDA	PSU-NRDA	Fisher	0:24:44	28.672418	-88.476554	1,373		
1361	Paramuricia branch	J2-541	MC338	3-Nov-10	Q1A						X	NRDA	PSU-NRDA	Fisher	0:01:48	28.672518	-88.476569	1,373		
1361	Paramuricia branch	J2-541	MC338	3-Nov-10	Q1A		X					NRDA	PSU-NRDA	Fisher	0:01:48	28.672518	-88.476569	1,373		
1363	Anemone	J2-541	MC338	3-Nov-10	Biobox Port						X	NRDA	PSU-NRDA	Fisher	3:42:57	28.672297	-88.476444	1,371		
1363	Anemone	J2-541	MC338	3-Nov-10	Biobox Port		X					NRDA	PSU-NRDA	Fisher	3:42:57	28.672297	-88.476444	1,371		
1364	White Anemone	J2-541	MC338	3-Nov-10	Q4B						X	NRDA	PSU-NRDA	Fisher	4:53:55	28.672166	-88.476611	1,371		
1364	White Anemone	J2-541	MC338	3-Nov-10	Q4B		X					NRDA	PSU-NRDA	Fisher	4:53:55	28.672166	-88.476611	1,371		
1365	Ophiuroid arm	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1367					X	NRDA	PSU-NRDA	Fisher	5:36:25	28.672370	-88.476407	1,371		
1365	Ophiuroid arm	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1367	X					NRDA	PSU-NRDA	Fisher	5:36:25	28.672370	-88.476407	1,371		
1366	Ophiuroid arm	J2-541	MC338	3-Nov-10	Biobox Stbd						X	NRDA	PSU-NRDA	Fisher	0:24:44	28.672418	-88.476554	1,373		
1366	Ophiuroid arm	J2-541	MC338	3-Nov-10	Biobox Stbd		X					NRDA	PSU-NRDA	Fisher	0:24:44	28.672418	-88.476554	1,373		
1367	Dead Paramuricia branch	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1365					X	NRDA	PSU-NRDA	Fisher	5:36:25	28.672370	-88.476407	1,371		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1367	Dead Paramuricia branch	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1365	X					NRDA	PSU-NRDA	Fisher	5:36:25	28.672370	-88.476407	1,371		
1368	Anemone	J2-541	MC338	3-Nov-10	Biobox Port						X	NRDA	PSU-NRDA	Fisher	3:42:57	28.672297	-88.476444	1,371		
1368	Anemone	J2-541	MC338	3-Nov-10	Biobox Port		X					NRDA	PSU-NRDA	Fisher	3:42:57	28.672297	-88.476444	1,371		
1369	Chaceon	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1400					X	NRDA	PSU-NRDA	Fisher	5:37:41	28.672367	-88.476441	1,371		
1369	Chaceon	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1400	X					NRDA	PSU-NRDA	Fisher	5:37:41	28.672367	-88.476441	1,371		
1370	Urchin	J2-541	MC338	3-Nov-10	Q6						X	NRDA	PSU-NRDA	Fisher	8:27:41	28.675076	-88.481303	1,386		
1370	Urchin	J2-541	MC338	3-Nov-10	Q6		X					NRDA	PSU-NRDA	Fisher	8:27:41	28.675076	-88.481303	1,386		
1371	Anemone	J2-541	MC338	3-Nov-10	Q8						X	NRDA	PSU-NRDA	Fisher	12:31:43	28.668298	-88.485099	1,458		
1371	Anemone	J2-541	MC338	3-Nov-10	Q8		X					NRDA	PSU-NRDA	Fisher	12:31:43	28.668298	-88.485099	1,458		
1372	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6						X	NRDA	PSU-NRDA	Fisher	8:27:41	28.675076	-88.481303	1,386		
1372	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6		X					NRDA	PSU-NRDA	Fisher	8:27:41	28.675076	-88.481303	1,386		
1372	Lamellibrachia (troph)	J2-541	MC338	3-Nov-10	Q6		X					NRDA	PSU-NRDA	Fisher	8:27:41	28.675076	-88.481303	1,386		
1373	Escarpia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1373	Escarpia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1373	Escarpia (troph)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1374	Escarpia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1374	Escarpia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1374	Escarpia (troph)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1375	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1375	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1375	Lamellibrachia (troph)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1376	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
1376	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1377	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1377	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1377	Lamellibrachia (troph)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1378	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6						X		PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1378	Lamellibrachia (vest)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1378	Lamellibrachia (troph)	J2-541	MC338	3-Nov-10	Q6		X						PSU	Fisher	8:27:41	28.675076	-88.481303	1,386		
1400	Barnacle	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1369						CF	PSU	Fisher	5:37:41	28.672367	-88.476441	1,371		
1400	Barnacle	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1369	X						PSU	Fisher	5:37:41	28.672367	-88.476441	1,371		
1400	Barnacle	J2-541	MC338	3-Nov-10	Biobox Port	LII-10-1369					X		PSU	Fisher	5:37:41	28.672367	-88.476441	1,371		
2166	Madrepora oculata	J2-541	MC338	3-Nov-10	Biobox Stbd			X				NRDA	USGS-PSU-NRDA	Morrison-Fisher	20:57:39	28.669505	-88.474476	1,373		
2167	Echinus sp.	J2-541	MC338	3-Nov-10	Q7			X	X		X	NRDA	USGS-NRDA	Morrison	9:34:04	28.673090	-88.482551	1,421		
2169	Munida sp.?	J2-541	MC338	3-Nov-10	Slurp Hose			X	X			CM- MN	USGS	Morrison	NA	NA	NA	NA		
2170	Munida sp.?	J2-541	MC338	3-Nov-10	Slurp Hose			X	X			CM- MN	USGS	Morrison	NA	NA	NA	NA		
2171	Munida sp.?	J2-541	MC338	3-Nov-10	Black Slurp			X	X			CM- MN	USGS	Morrison	21:12-21:16	28.670000	-88.470000	1,374		
2172	Munida sp.?	J2-541	MC338	3-Nov-10	Black Slurp			X	X			CM- MN	USGS	Morrison	21:12-21:16	28.670000	-88.470000	1,374		
2173	Munida sp.?	J2-541	MC338	3-Nov-10	Black Slurp			X	X			CM- MN	USGS	Morrison	21:12-21:16	28.670000	-88.470000	1,374		
2174	Munida sp.?	J2-541	MC338	3-Nov-10	Black Slurp				X			CM- MN	USGS	Morrison	21:12-21:16	28.670000	-88.470000	1,374		

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3441	Paramuricea	J2-541	MC338	3-Nov-10	Biobox Stbd	Paramuricea LII-10-680	X				X	NRDA	WHOI-PSU-Temple-NRDA	Shank-Fisher-Cordes	0:24:44	28.672418	-88.476554	1,373	X	subsample to Shank; to CF; to AQ; rest to NRDA: GU2888-A1102-T-E9-06
3442	Ophiuroid	J2-541	MC338	3-Nov-10	Biobox Stbd	Paramuricea LII-10-680	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	0:24:44	28.672418	-88.476554	1,373	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-07
3443	Ophiuroid	J2-541	MC338	3-Nov-10	Biobox Stbd	Paramuricea LII-10-680	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	0:24:44	28.672418	-88.476554	1,373	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-08
3444	Anemone morph 3	J2-541	MC338	3-Nov-10	Biobox Stbd	Paramuricea LII-10-680	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	0:24:44	28.672418	-88.476554	1,373	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-09
3445	White anemone	J2-541	MC338	3-Nov-10	Q4B		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	4:53:55	28.672166	-88.476611	1,371	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1102-T-E9-10
3446	Dead Paramuricea	J2-541	MC338	3-Nov-10	Biobox Port	Paramuricea LII-10-684	X				X	NRDA	WHOI-PSU-Temple-NRDA	Shank-Fisher-Cordes	5:36:25	28.672370	-88.476407	1,371	X	subsample to Shank; to CF; to AQ; rest to NRDA: GU2888-A1103-T-E9-01
3447	Ophiuroid	J2-541	MC338	3-Nov-10	Biobox Port	Paramuricea LII-10-684	X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	5:36:25	28.672370	-88.476407	1,371	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1103-T-E9-02

ID Number	Tentative ID_SampleType	Dive Number	Site	Date	Collection Container ID	Found on_Paired Sample	Genetics -Frozen	Genetics-RNALater	Genetics -EtOH	Genetics -FTA	SI Sample	Voucher	Institution	Researcher	Time Collected (UTC)	Lat DD WGS84	Lon DD WGS84	Depth (m)	Photo	Notes
3448	Actinoscypha sp.	J2-541	MC338	3-Nov-10	Biobox Port		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	3:42:57	28.672297	-88.476444	1,371	X	venus flytrap anemone; subsample to Shank; to CF; rest to NRDA: GU2888-A1103-T-E9-03
3449	Chaceon	J2-541	MC338	3-Nov-10	Biobox Port		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	5:37:41	28.672367	-88.476441	1,371	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1103-T-E9-04
3450	Barnacle morph 3	J2-541	MC338	3-Nov-10	Biobox Port	Chaceon crab TS3449	X				X		WHOI-PSU	Shank-Fisher	5:37:41	28.672367	-88.476441	1,371		3x20 and 1x15 in 4 tubes; subsample to CF
3451	Chaceon crab eggs	J2-541	MC338	3-Nov-10	Biobox Port	Chaceon crab TS3449	X						WHOI	Shank	5:37:41	28.672367	-88.476441	1,371		
3452	Echinus urchin	J2-541	MC338	3-Nov-10	Q7		X				X	NRDA	WHOI-PSU-USGS-NRDA	Shank-Fisher-Morrison	9:34:04	28.673090	-88.482551	1,421	X	subsample to Shank; to CF; to CM; rest to NRDA: GU2888-A1103-T-E9-05
3453	Amphipod	J2-541	MC338	3-Nov-10	Q7		X						WHOI	Shank	9:34:04	28.673090	-88.482551	1,421		
3454	Actinoscypha sp.	J2-541	MC338	3-Nov-10	Q8		X				X	NRDA	WHOI-PSU-NRDA	Shank-Fisher	12:31:43	28.668298	-88.485099	1,458	X	subsample to Shank; to CF; rest to NRDA: GU2888-A1103-T-E9-06
3455	Amphipod and sargassum	J2-541	MC338	3-Nov-10	Q8		X						WHOI	Shank	12:31:43	28.668298	-88.485099	1,458		
6028	rock	J2-541	MC338	3-Nov-10	rock box							DF	LSU	Roberts	21:38:33	28.669533	-88.474453	1,373		
6029	rock	J2-541	MC338	3-Nov-10	rock box							DF	LSU	Roberts	8:02:28	28.675294	-88.481098	1,378		

APPENDIX 2 - NOAA OFFICE OF OCEAN EXPLORATION QUICK LOOK REPORT

NOAA Office of Ocean Exploration Quick Look Report

Expedition Title: *Lophelia* II: Reefs, Rigs, and Wrecks

Results (please check all disciplines in which this cruise collected data)	Details (please describe any novel discoveries in the discipline, answers such as "possible, awaiting data analysis" and "no apparent discoveries" are acceptable)
Bathymetric Mapping x Yes ☐ No	(please note total area mapped and technology employed, e.g. multibeam, side scan, etc.) 4 sites using ship's new multibeam system
New Species Discovered ☐ Yes ☐ No	(please note number, type, and significance ,i.e. radically new vs. slight adaptation of known species) Unsure at this time, awaits further taxonomic resolution
Bio-prospecting ☐ Yes x No	(please note number, type, and potential use of new compounds discovered)
Habitat Range Extended ☐ Yes ☐ No	(please note species discovered in new habitats and how far from previous range were they found) Unsure at this time, awaits further taxonomic resolution
Chemical Processes x Yes ☐ No	(please note new or unusual chemical properties such as methane seeps, hypersaline pools, vents, etc. observed) Push cores were obtained in coral, seep, and background areas; water samples were obtained from CTD rosette and submersible deployed Niskin bottles for determination of alkalinity and pH.
Geologic Processes ☐ Yes x No	(please note new or unusual geologic processes that may impact scientific understanding of the region)
Physical Processes x Yes ☐ No	(please note new or unusual oceanographic processes that may impact scientific understanding of the region) Refined our estimates of the carbonate system of the deep Gulf of Mexico and the ongoing process of ocean acidification.
Sub/ROV/AUV Dives x Yes ☐ No	(please note name, type, and cumulative hours of bottom time for each platform / if available please provide average working time per dive for each platform / please note if new depth records were set) A total of 17lowerings of the ROV Jason II were completed. Only one of these was aborted prematurely due to technical issues. A total of approximately 260 hours of bottom time, or approximately 15 hours per dive, were completed.
New Technology ☐ Yes x No	(please note any new tools developed for or during this cruise, also identify first use of an existing technology in a new application) There was no new technology developed for this cruise. However, new configurations of the long-term camera deployment and the in situ hand-held macro camera were used very successfully.
Maritime Cultural Heritage x Yes ☐ No	(please note discoveries impacting knowledge of the past, i.e. number and type of shipwrecks) Two World War II era shipwrecks were investigated, the *Gulfoil* and the U-166.
Outreach x Yes ☐ No	(please describe outreach channels, e.g. Web, port call, etc., used in this project) First, the cruise was covered as a "Signature Expedition" on the NOAA Ocean Explorer web site. Mark Schrope from Nature was on board covering the expedition during leg 1 and a group from National Geographic was on board covering leg 2. Also on the second leg, Sheli Smith from the Past Foundation was leading additional E&O efforts.
Students Involved x Yes ☐ No	(please note the number and level of students on the expedition) There were a total of 4 post-docs, 9 graduate students and 1 undergraduate student on the cruise.
Multidisciplinary x Yes ☐ No	(please identify the formal disciplines represented in the science party) Biology, Ecology, Genetics, Geology, Geography, Geophysics, Archaeology, Education and Outreach,
Exploration of New Regions x Yes ☐ No	(please note if the area of operations had been previously studied, if so please check no and approximate as slight, moderate or significant, the level of knowledge before the cruise) Of the 15 different sites visited, 4 had never been dove on before. We had multibeam maps for all but 3 of the sites, but obtained these during the cruise. At the majority of the sites that had been previously visited, we explored new areas of the sites and discovered new coral assemblages at some of the deeper sites.

Ocean Exploration Quick Look Report Required Elements

The Office of Ocean Exploration (OE) does not require a specific Quick Look Report format. Reports submitted under other requirements (e.g. Cruise Summary Report (CSR)) or Fisheries-Oceanography Coordinated Investigations (FOCI)) are acceptable. In all cases Quick Look Reports submitted to OE should contain the following elements:

Project title: Deepwater Program: Exploration and Research of Northern Gulf of Mexico Deepwater Natural and Artificial Hard Bottom Habitats with Emphasis on Coral Communities: Reef, Rigs and Wrecks "*Lophelia* II"

Principal Investigator and institution:
James M. Brooks, TDI-BI
Charles Fisher, PSU
Erik Cordes, Temple
Bernie Bernard, TDI-BI
Iliana Baums, USGS
Robert Church, C&C
Dan Warren, C&C
Tim Shank, WHOI
Chris German, WHOI
Elizabeth Goehring, PSU
Ian MacDonald, FSU
Harry Roberts, LSU
Susan Welsh, LSU
Gary Wolff, TDI-BI

Expedition title: *Lophelia* II Cruise3

Expedition dates and itinerary: (a simple table is sufficient)

Date	Site	Dive Number	Lat DD_WGS84	Lon DD_WGS84
10/15/2011	VK826	J2-526	29.158444	-88.016242
10/16/2011	MC885	J2-527	28.066527	-89.713692
10/17/2011	GC246	J2-528	27.689721	-90.644962
10/18/2011	GC354	J2-529	27.597896	-91.826356
10/19/2011	GB299	J2-530	27.684991	-92.220535
10/20/2011	GB535	J2-531	27.421338	-93.595971
10/21/2011	GC140	J2-532	27.811076	-91.53722
10/22/2011	GC249	J2-533	27.737741	-90.521707
10/23/2011	VK906	J2-534	29.068903	-88.377581
10/24/2011				
10/25/2011	VK906/862	J2-535	29.068996	-88.376952
10/26/2011	MC751	J2-536	28.193494	-89.798639
10/27/2011	MC79	J2-537	28.161336	-89.752292
10/28/2011				

Date	Site	Dive Number	Lat DD_WGS84	Lon DD_WGS84
10/29/2011	MC118	J2-538	28.855867	-88.493561
10/30/2011	DC673	J2-539	28.310634	-87.307289
10/31/2011	VK826	J2-540	29.15462	-88.022582
11/1/2011				
11/2/2011	MC338	J2-541	28.675076	-88.481303

Chief Scientist and institution:

Erik Cordes (Chief Scientist Sept 5 - 12)
Biology Department, 1900 N 12th St, Philadelphia PA 19122

Charles Fisher (Chief Scientist Aug 19 – Sept 5)
208 Mueller Laboratory, The Pennsylvania State University, University Park, PA 16802

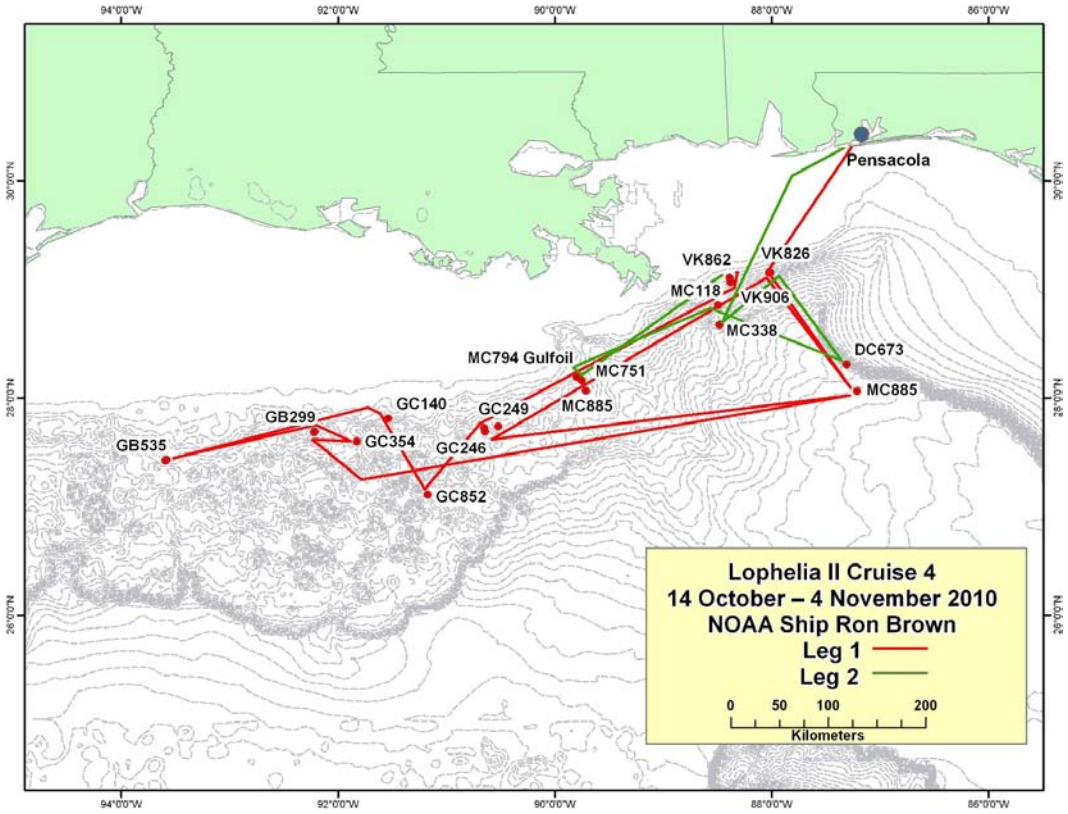
Co-sponsors / partners / participating organizations: (a table of names and affiliations)

PSU	Dept. of Biology, State College, PA 16802
LSU	Geosciences Complex, Baton Rouge, LA 70803
Florida State University	Dept of Oceanography, 117 N. Woodward Ave., Tallahassee, FL 32306
TEMPLE	Biology Department, 1900 N 12th St, Philadelphia PA 19122
WHOI	National Deep Submergence Facility, Woods Hole Oceanographic Institution, Woods Hole, MA 02543-1050
USGS	US Geological Survey, Florida Integrated Science Center, St. Petersburg, FL 33701
TDI-Brooks International	1902 Pinon Dr., College Station, TX 77845
BOEMRE	Gulf of Mexico OCS Region and Atlantic Activities, New Orleans, LA 70123
NOAA OE	NOAA Office of Ocean Exploration, 1315 East-West Highway, Silver Spring, MD 20910
C & C	730 E. Kaliste Saloom Rd., Lafayette, LA 70508

Vessel Identification: (if applicable)
NOAA Ship *Ronald H. Brown*

Primary Equipment: (embarked vehicles, sensors, and tools of significance)
JASON II WHOI

Geographic area of operations (identify common name such as Northwestern Hawaiian Islands as well as boundary coordinates for the area, and a map if available)Gulf of Mexico



Summary of Expedition Objectives: (a list of the proposed objectives that were met as a result of the expedition)
This cruise employed the Remotely Operated Vehicle (ROV) Jason II II to explore new sites, make a variety of deployments and collections, and conduct a variety of studies on natural deep water coral reefs and three deep water shipwrecks. This was a 22-day cruise with 24 site dives and an at-sea personnel transfer.

Milestones Achieved: (This section of the report should amplify the information provided in the official OE cover sheet summary of results. This section should elaborate on key findings)
The first leg of the cruise departed Pensacola and proceeded to the western-most known site of Lophelia abundance in the Gulf. Along the way, we collected a number of sediment traps and moorings, contributing to our understanding of the impact of the oil spill in deep water. We continued our long term monitoring of many sites, photographing the exact same coral colonies that we have visited in the past. We collected hundreds of specimens of corals and their associates of a variety of species, some of which may be new to science. A number of new sites were explored as well, and we found some coral and natural hydrocarbon seep communities that had not been previously known. The second leg of the cruise completed a smaller loop around the Gulf. We started in the Viosca Knoll region and headed to the Mississippi Canyon. There, we visited the location of a long-term observatory on the seafloor only 10 miles from the site of the *Deepwater Horizon* disaster. The equipment on the seafloor at this site, Mississippi Canyon 118, has been monitoring the changes in gas hydrates (methane ice) for a number of years. The scientists that work at this site had recently discovered a large area of coral there, and we headed there to study it. We also visited a World War II shipwreck, the *Gulfoil*. The archaeologists that are part of our study visited this site in 2008, and found the wreck covered in Lophelia. One of the largest Lophelia reefs in the Gulf is on a man-made structure. We also explored a few sites even closer to the former site of the DWH rig. We also dived on a new site at over 2,000 meters depth, close to where we discovered a new species of mussel last year to see what other

differences there may be in the seep and coral communities in this part of the Gulf. Finally, we collected more live coral samples to bring back to the lab.

Sample log entries: (from any daily logs of activities that were kept)

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NOAA OCEAN EXPLORATION AND RESEARCH SITUATION REPORT FOR 2010/10/18 to 2010/10/18

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CRUISE: LOPHELIA II 2010

DATE/TIME FILED: 2010/10/20 06:56:35 UTC

FILED BY: Tom Ryan

VESSEL: NOAA Ship Ronald H. Brown

GEOGRAPHIC AREA: North Atlantic Ocean,Gulf of Mexico,Northern Gulf of Mexico

PERSONNEL ONBOARD:

Others:

1. Erin Becker (Pennsylvania State University)
2. Pen Yuan Hsing (Pennsylvania State University)
3. Dannice Ruiz (Pennsylvania State University)
4. Brian DeSanti (Florida State University)
5. Ian MacDonald (Florida State University)
6. Amanda Demopolous (US Geological Survey)
7. Janessy Frometa (US Geological Survey)
8. Cheryl Morrison (US Geological Survey)
9. Thomas Ryan (NOAA National Oceanographic Data Center (NODC))
10. Kody Kramer (Bureau of Ocean Energy Management, Regulation and Enforcement)
11. Chris Cleaver (Louisiana State University)
12. Darren Depew (Louisiana State University)
13. Scott Hansen (Woods Hole Oceanographic Institute)
14. Matt Heintz (Woods Hole Oceanographic Institute)
15. James Pelowski (Woods Hole Oceanographic Institute)
16. Tim Shank (Woods Hole Oceanographic Institute)
17. Akel Kevis Stirling (Woods Hole Oceanographic Institute)
18. Ben Tradd (Woods Hole Oceanographic Institute)
19. Jim Varnum (Woods Hole Oceanographic Institute)
20. Robert Waters (Woods Hole Oceanographic Institute)
21. Mark Schrope (Open Water Media)
22. Walter Cho (Woods Hole Oceanographic Institution)
23. Jason Kapit (Woods Hole Oceanographic Institution)

24. Dara Scott (Woods Hole Oceanographic Institution)
25. Erik Cordes (Temple University)
26. Samuel Georgian (Temple University)
27. Jay Lunden (Temple University)
28. Andrea Quattrini (Temple University)
29. Lara Henry (University of South Florida)

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DIVE OPERATIONS:

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DIVE TITLE: J2-528 GC246
VEHICLE: JASON II
START: 2010/10/17 21:07:20 UTC
END: 2010/10/18 13:11:23 UTC
LATITUDE: 27.71852
LONGITUDE: -90.666694
DIVE SITE: GC246
DEPTH RANGE:
MAX DEPTH: 874.23 Meters

DIVE TITLE: J2-529 GC354
VEHICLE: JASON II
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627
LONGITUDE: -91.8333532
DIVE SITE: GC354
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

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SCIENCE ACTIVITIES:

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SCIENCE ACTIVITY TITLE: J2-528 GC246 Biological
SYSTEM: Biological, Biological collection
START: 2010/10/17 21:07:20 UTC

END: 2010/10/18 13:11:23 UTC
LATITUDE: 27.71852 , 27.7
LONGITUDE: -90.666694, -90.6509811
DEPTH RANGE:
MAX DEPTH: 874.23 Meters

SCIENCE ACTIVITY TITLE: J2-528 GC246 Brow Cam
SYSTEM: Multimedia, Submersible Video, JASON Brow Camera
START: 2010/10/17 21:07:20 UTC
END: 2010/10/18 13:11:23 UTC
LATITUDE: 27.71852 , 27.7
LONGITUDE: -90.666694 , -90.6509811
DEPTH RANGE:
MAX DEPTH: 874.23 Meters

SCIENCE ACTIVITY TITLE: J2-528 GC246 Pilot Cam
SYSTEM: Multimedia, Submersible Video, JASON Pilot Camera
START: 2010/10/17 21:07:20 UTC
END: 2010/10/18 13:11:23 UTC
LATITUDE: 30, 26
LONGITUDE: -90.666694, -90.6509811
DEPTH RANGE:
MAX DEPTH: 874.23 Meters

SCIENCE ACTIVITY TITLE: J2-528 GC246 Science Cam
SYSTEM: Multimedia, Submersible Video, JASON Science Camera
START: 2010/10/17 21:07:20 UTC
END: 2010/10/18 13:11:23 UTC
LATITUDE: 27.71852 , 27.7
LONGITUDE: -90.666694 , -90.6509811
DEPTH RANGE: 740
MAX DEPTH: 820 Meters
COLLECTED:
MEDIA TITLE: J2-527 MC885 Science Cam HD Frame Grabs
START: 2010/10/16 16:00:00 GMT-5
END: 2010/10/17 16:00:00 GMT-5
LATITUDE: 30, 26
LONGITUDE: -94, -84
COLLECTION DEPTH: 740 Meters

MEDIA CLASS:
MEDIA TYPE:
CUSTODIAN:
NOTES:

SCIENCE ACTIVITY TITLE: J2-529 GC246
SYSTEM: Oceanographic, Submersible Ocean Sensors, SBE CTD
START: 2010/10/17 21:07:20 UTC
END: 2010/10/18 13:11:23 UTC
LATITUDE: 30, 26
LONGITUDE: -90.666694, -90.6509811
DEPTH RANGE:
MAX DEPTH: 874.23 Meters

SCIENCE ACTIVITY TITLE: J2-529 GC354 Science Cam
SYSTEM: Multimedia, Submersible Video, JASON Science Camera
START: 2010/10/18 16:00:00
END: 2010/10/18 16:00:00
LATITUDE: 27.6000627 , 27.5833517
LONGITUDE: -91.8333532 , -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

SCIENCE ACTIVITY TITLE: J2-529 GC354 CTD
SYSTEM: Oceanographic, Submersible Ocean Sensors, SBE CTD
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627, 27.5833517
LONGITUDE: -91.8333532, -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

SCIENCE ACTIVITY TITLE: J2-529 GC354 Pilot Cam
SYSTEM: Multimedia, Submersible Video, JASON Pilot Camera
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627 , 27.5833517

LONGITUDE: -91.8333532 , -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

SCIENCE ACTIVITY TITLE: J2-529 GC354 Brow Cam
SYSTEM: Multimedia, Submersible Video, JASON Brow Camera
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627, 27.5833517
LONGITUDE: -91.8333532 , -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

SCIENCE ACTIVITY TITLE: J2_529 GC354 bottle cast
SYSTEM: Water Sampling, Bottle Sampling, 12 bottle Niskin rosette
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627, 27.5833517
LONGITUDE: -91.8333532, -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

SCIENCE ACTIVITY TITLE: J2-529 GC354 Biological sampling
SYSTEM: Biological, Biological collection
START: 2010/10/18 21:00:36 UTC
END: 2010/10/19 13:18:43 UTC
LATITUDE: 27.6000627, 27.5833517
LONGITUDE: -91.8333532, -91.8227984
DEPTH RANGE: 538.40
MAX DEPTH: 612.06 Meters

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==========END OF SITUATION REPORT==========
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Explore more at http://oceanexplorer.noaa.gov

Summary of Digital Data Collected: (Identify volume in MB/GB/TB etc. and type of data collected. Be as explicit as possible, e.g. identify high definition video as opposed to simply video.) Approx 4 TB of multibeam swath bathymetry, HD video and stills from JASON II

Summary of outreach and educational activities: (a summary discussion of the nature and success of the activities, i.e., number and types of displays and participants in the case of an open-house event) - NOAA Ocean Exploration & Research Signature Expedition, Near-real time web-coverage and NOAA Web Coordinator / Data Manager on board

As with previous cruises, the *Lophelia II* Oct/Nov 2010 cruise was featured on the NOAA Ocean Explorer website (http://oceanexplorer.noaa.gov/welcome.html) as a "Signature Cruise" and was promoted through NOAA OE channels. During the cruise, log entries, seafloor and shipboard imagery and seafloor video clips were posted to the NOAA OE site on almost a daily basis. Various cruise participants again authored log entries as an opportunity to feature individual contributions to the overall research agenda. A Highlights "Best Of" Imagery and Video DVD was created and provided to NOAA OE. Due to the discovery of Deepwater Horizon oil spill damage towards the end of the cruise, press releases were drafted in collaboration with NOAA and BOEMRE, and findings from the cruise were featured on NPR, National Geographic, Nature and in the NYTimes.

During the cruise, the archaeological team again worked with a cohort Ohio schools to incorporate aspects of the shipwreck research, ROV and AUV technology, and basic *Lophelia* biology into the schools' project-based learning curriculum on ROV design and development. Participating teachers accessed materials about the project through a Basecamp site that included PowerPoint presentations, a cruise blog, and other relevant literature. Participating students were encouraged to post questions and sent in Styrofoam cups to be "scrunched" as part of a study on pressure. Approximately 250 students participated.

In addition to providing "real-time" coverage of cruise events, the NOAA OE *Lophelia II* website has been incorporated into the project's problem-based curriculum: *Lophelia II Deep Sea Corals Unit.* The problem-based curriculum unit targets high school level students in biology or environmental science and references cruise logs, video and relevant multimedia modules to provide an authentic context for students. The curriculum also features a Student Challenge to locate potential Gulf of Mexico oil-drilling sites (using fictitious maps) that minimally impact *Lophelia* communities. In March-May 2011, the curriculum was tested by a small group of teachers and students in the Seattle School District. Feedback from teachers is currently being collected. A final lesson on ocean acidification is being developed.

Thoughts for the Future: (a discussion of any ideas for future exploration, research, or management activities related to the work accomplished) Cruise 4

Summary of Expedition Operations (A good summary would identify as many of the following elements as possible for each "operation." Table formats are ideal for this aspect of the report: data type collected / time / position / ID tag /operation type /dive tracklines / depth /comments)

Date	Activity
10/13	Scientists begin to arrive
10/14	Departure delayed from 1500 to 1700 in order for an agent from the American Bureau of Shipping to arrive at the ort and renew the ship's annual certification. The Ron Brown left the pier at 1700
	Before leaving port, the ship conducted a series of stress tests on the propulsion system since it had undergone significant repairs during port call in Pensacola. At approximately 1930 the ship was underway to the first site
10/15	Transit. Arriving on station (VK826) at 0200 hrs. At 0800 completed navigation survey and calibration of ultra-short baseline (USBL) navigation system by Jason group
	0930 began recovery of two moorings deployed in 2009. Both acoustic releases indicated that they had released, but never sighted and the range to the beacon never declined below the water depth indicating that the mooring was likely to still be on the bottom. At 1130 sediment trap called up and it was secured and recovered at approximately 1200
	1500 Jason launched at VK826 (**J2-526**) for 20 hr dive. A few issues with reconciling last year's navigation with this year's while transiting to T:1 waypoint. T:1 collected at 1530 and T:2 collected at 2045.
	Transit to Mosaic Marker M with genetic collections along the way. Finished Mosaic M at 05:47 and fired Niskin E moving to Mosaic Marker N finished Mosaic N at 07:03 and fired Niskin C. 0200 start to set up for a series of push cores near Mosaic N ship lost its dynamic positioning. 0300 recovered time-lapse camera deployed in 2009 at VK826 camera broke in a number of places as it was transition over to the elevator at 0330. Elevator released at 0430 and Jason ascent began shortly after.
10/16	Jason recovered at 0530 elevator recovered at 0645 start transit to VK862
	0830 recovered sediment trap at VK862 deployed in July 2010
	1000 transit to MC885 for next dive. 1800 arrive at MC885 lowered USBL pole and deployed CTD 1900 complete
	2000 Jason launched at MC885**(J2-527)** for 12 hr dive
	Mosaics complete at 2230 set up for push cores associated with mosaic site U
	Dropped genetic marker #21 made a few coral collections near Geo target 1 at 0237
	Jason on deck at 0800 begin transit to MC751
10/17	0900 recovery of sediment trap at MC751 deployed in 2009
	1000 transit to GC246
	1400 CTD cast at GC246
	Jason launch on GC246 (**J2-528)** at 1600 at 16 hr dive
10/18	Jason recovered 0800 start transit to GC354
	1400 CTD cast at GC354
	Jason launch on GC354 **(J2-529)** at 1600 for 16 hr dive
	0240 deployed genetic marker #33 0350 sampled live *Lopheliaand* *Hoplostethus* fired single niskin at 0418 and deployed genetic marker #37
10/19	Jason recovered at 0800 start transit to GB299
	1300 Single pass of multibeam over site GB299
	1400 CTD cast at GB299
	Jason launch on GB299 **(J2-530)** at 1600 for 16 hr dive
	Completed re-photographing mosaic B at 0130 at 0200 located mosaic marker D and re-

Date	Activity
	photographed mosaic D at 0240 mosaic D complete took 3 push core samples
10/20	Jason recovered at 0800 start transit to GB535
	1400 CTD cast at GB535
	1600 launch Jason at GB535 **(J2-531)**
	2221 re-photographed mosaic C and took push cores associated with mosaic C at 0049 found mosaic marker F and re-photographed mosaic F complete at 0052 moved over to repeat mosaic marker E only a few meters away from mosaic F
10/21	0730 recovered Jason start transit to GC140
	Launch Jason at 1700 site GC140 **(J2-532)**
	Between 0130 and 0300 series of genetics collections made focusing on *Leiopathes* and octocorals tether remained a problem as did the Doppler tracking the vehicles - experienced Doppler loss at times and would simply lurch and move forward
	Depoloyed mosaic marker W at 0545 for a down-looking mosaic
10/22	0800 recover Jason, transit to GC852
	Recover current meter mooring at GC852 at 1200
	1400 CTD cast at GC852
	1500 depart GC852 transit to GC249 at 1900 multibeam survey of GC249
	2400 launch Jason at GC249 **(J2-533)**
	Some *Callogoria* were sampled there was little else at the geo targets, so decision made to call the ROV up early at 1230 for a 1300 recovery to allow for an increased amount of time on the seafloor at VK906
10/23	1300 recover Jason at GC249 start transit to VK906
	2000 launch Jason at VK906 (**J2-534**)
	At 0210 re-photographed mosaic J and moved on to mosaic L at 0245 niskin B fired near mosaic L and completed a series of push cores associated with each mosaic
	0510 collected temperature probe (T1)
10/24	0800 recover sediment trap at VK906
10/25	0400 recover Jason
	0700 meet **Southerner** for at-sea personnel transfer
	1000 heading back to station 1200 CTD cast at VK906
	1100 launch VK906/862 (**J2-535**)
	Deployed marker Y at unmarked mosaic site done in 2009 then set up to repeat this mosaic moved N about 10 meters and confirmed second mosaic site and deployed marker Z and set up to repeat this mosaic. Took niskin water sample at this location and completed push cores associated with both mosaics
	Repeated mosaic R at 1041 and repeated a portion of mosaic T at 1024 attempted to locate marker S twice with time running out completed two push cores associated with mosaic T
10/26	0745 recovered Jason at 0800 began transit to MC751
	1600 launch Jason at MC751 (**J2-536**) on coordinates of mosaic marker H – repeated mosaic H1 and H2 and did associated push cores with mosaic H
	0200 re-photographed mosaic G and did associated push cores
	Several meters away located large *Callogorgia / Asteroschema* community and deployed marker 41 and collected horizontal images for mosaicking noted “brown detrital-like debris” on the upper branches of this coral colony collected them for inspection and mosaicked the community
10/27	0800 recovered Jason CTD rosette cast at 0830
	1000 began slow transit to Gulf Oil site
	1600 launch Jason at Gulf Oil site (**J2-537**)

Date	Activity
	Setting up on the starboard bow ran several mosaic test lines to determine the best way to approach the mosaic and fine tune the automatic image timer on Jason's HD camera system.
10/28	1200 Jason recovered early due to storm front moving to the Brown at a high speed after recovery began transit to MC118
	1930 arrive at MC118 dive delayed until 0800 on Oct 29 ship preceded to multibeam the NRDA survey sites within 15 miles of the DWH.
10/29	0000 Multibeam of NRDA sites continued scheduled to finish by 1200. Decision made to delay dive until 1200. At 1200 dive postponed until 1600 due to high winds.
	1600 launched Jason at MC118 (**J2-538**)
	Ole Miss Hydrate Observatory Site – more madrepora at this site than any other visited in the Gulf had a number of golden crabs
10/30	0800 recover Jason head to new Desota Canyon site (80 miles away)
	1430 arrive at DC673 run multibeam W to E over station
	1620 launch Jason at DC673 (**J2-539**) for 16 hr dive
	Bathymetry was not consistent between the 3D seismic map and the multibeam used as an underlay
10/31	0800 recover Jason start transit to VK826 (60 miles away)
	1600 launch Jason at VK 826 (**J2-540**)
	Last dive at site with the main organisms for laboratory study
	Re-photographed mosaic Q and O
11/1	2000 recover Jason transit to MC338
11/2	0800 launch Jason at MC338 (**J2-541**)
	Exploratory dive selected for survey as part of a NRDA effort
	Spotted recently dead or dying and stressed coral communities made some additional collections then deployed Marker AA for a detailed mosaic to determine the size of the site and approximate distribution of the corals.
	Arrived on U-166 site at 0600 local time proceeded to locate the microbiology coupon experiment on the mail hull remains as well as looking for evidence of fouling from DWH oil spill.
	Left U-166 and headed toward the passenger ship *Robert E. Lee* while in transit between the wreck sites Jason experienced a loss of all power and decision was made to abort the dive immediately and prepare for a "dead vehicle" recovery.
11/3	Jason recovered dead in water at 1045 local time
	0130 local time started slow transit to port
	1600 Jason repaired insufficient time remained for productive dive and continued towards port for on time arrival the following morning.
11/4	0900 arrive Pensacola, FL at