HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT DIVE: PV- 526

MISSION STATUS

Location: Pioneer Bank

Latitude: 25º 34.4585 N **Longitude:** 173º 30.3828 W

Mission Date: 9 October 2003 **Duration:** 5 hours, 42 minutes

Maximum Depth: 1825

Project Title: Seamount Surveys of Deep-Water Coral Distributions as Related to Geological Setting in the Northwestern Hawaiian Islands

Principal Investigator: Amy Baco-Taylor

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Observer 1: Amy Baco-Taylor **Observer 2:** John R. Smith

Address: See above. **Address:** HURL

Pilot 1: Terry Kerby **Pilot 2:**

Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

Objectives:

1. Perform observational transects of invertebrate fauna along the eastern slope at 1800 m and 1200 m. Also begin vertical transect 1800 m up.
2. Collect samples for identification and for voucher specimens.
3. Collect rock samples to characterize geological setting,

Observations, findings, etc:

We landed on the seafloor in a pillow basalt area with dense coverage of gorgonian octocorals and large sponges. Corals were >10 individuals per m2 with as many as 7 or 8 species in high abundance. There were 3-4 species of bamboo corals, Paragorgia, Chrysogorgids, and Iridigorgids. Sponges that looked like catcher's mitts were also very abundant. The density and

abundance of this suite of species continued for most of the dive. We completed one 1000m long transect at a depth of 1800 m. The same species were observed along the transect. Density varied along the transect, but there were always at least a few individuals per m2. Species dominance also varied along the transect. At the completion of the transect, we moved to the crest of the ridge and began working our way up the crest. Currents were very strong the entire dive, but became particularly strong as we moved up slope. As we got shallower, a species of Corallium became abundant. Some of the Corallium trees were over a meter across. Corallium were most abundant where bamboos were not present as we moved shallower. Metallogorgia was also observed frequently as we moved shallower. When we ended the dive we had only made it up to 1650m due to the strong currents. When we left the bottom, we were in an area of coral and sponge forest that was so dense, you almost couldn't see the basalt. Awesome dive!

Species list:
Please mark whether S-single; F-Few (2-10); M-Many (11-100); A-Abundant (>100)
(e.g., Symphysanodon maunaloae-M)
- add rows as needed

Large Sponges – AA	Yellow Gorgonian – AA
Stick bamboo – AA	Bushy Bamboo – AA
Branched stick Bamboo – M	Chrysogorgids – A
Iridigorgids – M	Corallium sp. – A
Paragorgia red – M	Metallogorgia – M
Narella sp - F	Skeleton sponge – F
Other stalked sponge - F	Planar branched bamboo - F

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The Pisces barely had enough power to go against the current

Recommendations for corrective action or improvement

Get thrusters with more horse power ☺

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

We completed one 1800 m depth transect, but did not complete our vertical transect to 1200 m. Only got to 1650 m due to strong currents.

List specimens or samples collected on the mission.

2-Corallium
2- Primnoids
5- Bamboos
2- Iridigorgia
1 – small black
2 – primnoid white sticks
2- Paragorgia
1- Yellow Gorgonian
1 small sponge
2 – Chrysogorgids
5 –Basalt Rocks

DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Fill in the appropriate statement below and sign this form.

I hereby release the data archived by HURL for public consumption following mission

(project title)

held on 9 October 2003 in the following way:

a. CTD data by 9 October2003 (date)

b. voice transcripts, video, and still camera film by 9 October 2003 (date)

c. other 9 October 2003 (date)

d. I will give my written consent to individuals wishing to use these data prior to the above dates depending on the nature of the request(s).

_____ Principal Investigator