HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P4-076

MISSION STATUS

Location: Off Kona, Marker #2 (700m), #3(197m)

Mission Date: Friday, November 15, 2002

Maximum Depth: 760 m

Project Title: Microbially Mediated Glass Alteration

Principal Investigator: Dr. Hubert Staudigel

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

The mission of this dive was to revisit marker #2, collect rock samples and try and recover the oxide crust that is observed on the glass. A new site will be initiated around the 200m isobar and 5 incubation charges will be deployed (Staudigel #19, 20, 21, 44, 43).

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Recommendations for corrective action or improvement:
Remounting of the Digital Sony camera in a manner that would allow view of the basket.

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

I believe this dive was successful. We easily found Marker #2, collected a rock sample and proceeded to use the slurp gun as a hammer to break off the oxide crust and pull it into the rosette. We then progressed up slope toward the NE coming to a highly weathered basalt flow and contoured S along the 200m isobar. This transect flew over the carbonate-reef structure, occasionally basalt fragments were strewn about the reef platform. During the transect we came across a fault feature (running E-W), position noted. Further south the carbonate platform was overlain with a basalt flow, position noted. We followed the flow down slope (ca. 70% slope) to 225m then upslope to 150m where the pillows were noticeably more colonized by macrofauna. The location of this flow put us south of Palemano point. We proceeded north along the 150m isobar crossing the coral platform and coming across another fault (N-S direction) and a small weathered lava flow that did not proceed deeper. We progressed down slope to 200M and return to the original flow via a S contour. We again crossed the coral platform, fault and landed at the basalt flow (197m). We deployed 5 SIO charges and the number 3 marker and collected rocks and slurp gun sample. We were unsuccessful in trying to break pieces of the massive flow off for sampling. Upon completion we returned to the surface.

List specimens or samples collected on the mission.

Deployments:
Marker 3: SIO # 19, 20, 21, 43, 44

Sample pickups:
Slurp Gun: #1 at Marker 2, #2 at marker 3
Whole rock samples: 2 basalt rocks at Marker 2, 2 basalt rocks on the journey up slope, 1 lonely rock from the 150 northern flow, 5 rocks from at marker 3
SIO scoop samples: scoop #7 at Marker 2
Niskin bottle: Marker 3

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 November 15, 2002 (date) in the following way:

a. CTD data by_____(date)

b. voice transcripts, video, and still camera film by Nov 2004 (date)

c. other_____(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