

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-244

MISSION STATUS

Location: Pele's Vents and Pit of Death
Mission Date: September 13, 1993
Maximum Depth: 1300 meters
Project Title: Microbiology of Loihi Seamount
Principal Investigator: Fred Dobbs, Dave Karl
Address: University of Hawaii
Department of Oceanography
1000 Pope Road
Honolulu, HI 96822
Phone: 956-8668
Observers: Fred Dobbs and Craig Moyer
Addresses: Same as above

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

Our objectives were to collect material for microbiological, geochemical, and other analyses at Pele's Vents (vent shrimp, slide sticks, vent water samples) and at the Pit of Death (flocculent mat material, water samples).

The techniques were well executed by Terry Kerby, the pilot. We collected excellent samples and essentially all objectives were met.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The strobe was not operating, hence, our photos will be of inferior quality. The hose clamps on the slide stick quiver broke free with the water movement at the surface and we lost the slide sticks and quiver. Dobbs neglected to switch the toggle on the video for Tape #3. Therefore, we have no video of the Pit of Death.

Recommendations for corrective action or improvement:

Check strobe and repair if necessary.
Do not allow hose clamps to be strapped around hydraulic lines. There was a potential, when the quiver was rattling loose, for the clamps to have cut the hoses.
Consider having the pilot double-check about the video toggle.

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

Absolutely yes! We collected six of six water samples, filled six rosette jars with mat material and collected shrimp in a 7th. Our only regrets were mechanical (the hose clamps - see above) and Dobbs' memory lapse about the video toggle.

This was an excellent dive. Kudos to pilot Terry Kerby and the support crew of HURL and R/V KILA!

List specimens or samples collected on the mission.

- vent shrimp (family Breselliidae)
- microbial mat
- water from vents

P.S. I really like the rosette sampler! -Fred Dobbs

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 Microbial Diversity at Loihi Seamount (project title) held on September 14, 1993 (date) in the following way:

- a. CTD data by September 14, 1995 (date)
- b. voice transcripts, video, and still camera film by September 14, 1995 (date)
- c. other September 14, 1995 (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