

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-111

MISSION STATUS

Location: Loihi, Pele's vents
Mission Date: September 29, 1988
Maximum Depth: 1070 m.
Project Title: "Microbiology of Loihi Seamount Vents and
Plumes"
Project Leader: Dr. Dave Karl
Address: University of Hawaii
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Honolulu, Hawaii 96822
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Observers: Dr. D. Karl, Dr. W. Ghiorse
Address: Department of Microbiology
Cornell University
Ithaca, New York

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

Our primary objective for dive P5-111 was to visit Pele's vent area for the purpose of sampling bacterial mats around the active hydrothermal vents. Our method was to use the Niskin baggie sampler as a suction device for the purpose of removing bacterial mats from rock surfaces. The samples collected were used for microscopy and enrichment culture experiments. Both were successful.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

1. No tracking system
2. Camera (still) failure 1 hour into the dive

Recommendations for corrective action or improvement:

Repair #2, above (it is apparently not the first time it has failed).

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

Yes, we achieved our primary dive objectives.

List specimens or samples collected on the mission.

- 1 rock sample
- 3 samples of bacterial mats

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 Dive P5-111
(project title) held on September 29, 1988 (date) in the following way:

- a. CTD data by immediately (date)
- b. voice transcripts, video, and still camera film
by January 1, 1989 (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).

Project Leader