

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-154

MISSION STATUS

Location: Loihi Seamount
Mission Date: 25 September 1990
Maximum Depth: 1075 m
Project Title: Geochemistry and Microbiology of Loihi Seamount
Hydrothermal Vent Fields
Project Leader: Karl/McMurtry
Address: Department of Oceanography
University of Hawaii

Phone: 956-6858
Observers: Sedwick/Dobbs
Address: same as above

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

To sample hydrothermal solutions and biota from Pele's Vents, Loihi Seamount, observe vent habitat, deploy microbiological "slide sticks".

Water samples and biota samples were returned to the laboratory for lipid analysis, still on-going.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

1 Titanium sampler did not fire (alignment problem). Had to use high-temp probe; low-temp probe broken on P5-153. 1 Niskin baggie sampler broke free and didn't open. Lost GAWS sampler upon recovery.

Recommendations for corrective action or improvement:

Reorganization of sample basket to provide more usable space for water sampling.

Add weight to one end of the GAWS sampler to facilitate their handling by the sub's arm.

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

Yes, about 75% successful.

List specimens or samples collected on the mission.

- 5 water samples
- 2 water/biota samples
- 1 rock
- 3 slide sticks deployed

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 Geochem. and Microbiology of Loihi Seamount project title) held on 9-25-90 (date) in the following way:

- a. CTD data by 9-25-92 (date)
- b. voice transcripts, video, and still camera film by 9-25-92 (date)
- c. other 9-25-92 (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