

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-242

MISSION STATUS

Location: Loihi Seamount
Mission Date: September 7, 1993
Maximum Depth: 1045 m
Project Title: Mass and heat fluxes from Loihi Seamount
Principal Investigator: Frank Sansone/Gary McMurtry
Address: University of Hawaii
Department of Oceanography
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Observers: Frank Sansone
Addresses: Same as above

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

Objectives

Chemical - Characterize vent and plume waters at Loihi. Vent samples were collected with titanium "major" and gas-tight samples, and with the stainless steel "La Bamba" sampler. Plume water was sampled with Niskin bottles. Samples were collected at the upper-most (975 m) and lower-most (1030 m) vents at "Pele's Vents".

Biological - Collect bacterial mat and shrimp samples for biochemical characterizations. Shrimps were collected at the "Shrimp Zone" site (975 m); mat samples were collected on the eastslope, between the pressure sensor field and the Loihi observatory at a depth of 990 m.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Titanium "major" sampler were hard to trigger.

Recommendations for corrective action or improvement:

- 1) Rewrap sampler handles with rope overlain with duct tape;
- 2) Make sure handles are installed so the actuators are aligned with the "Tom-thumb" hydraulic ram.

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

Mission goals were completely met.

List specimens or samples collected on the mission.

- "Major" samples of vent water (x2)
- Gas-tight samples of vent water (x2)
- "La bamba" gas-tight samples of vent water (x1)
- Niskin plume samples (x3)
- Shrimp trap with 20 animals
- Suction samples of bacterial mat (x5)
- Suction samples of shrimp (x3)

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 Mass and heat fluxes from Loihi Seamount (project title) held on September 7, 1993 (date) in the following way:

- a. CTD data by Immediately (date)
- b. voice transcripts, video, and still camera film by September 7, 1995 (date)
- c. other September 7, 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