

HAWAII UNDERSEA RESEARCH LABORATORY  
QUICK LOOK REPORT MISSION NO. P5-112

## MISSION STATUS

Location: Loihi Submarine Volcano, Hawaii  
Mission Date: 30 September 1988  
Maximum Depth: 1200 m.  
Project Title: Seagrant Loihi  
Project Leader: Alexander Malahoff  
Address: Department of Oceanography  
University of Hawaii  
1000 Pope Road, MSB 319  
Honolulu, HI 96822  
Phone: 948-6802  
Observers: John Smith, Frank Sansone  
Address: Department of Oceanography  
University of Hawaii  
1000 Pope Road, MSB 303  
Honolulu, HI 96822

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

Our dive plan was to set down in the west pit crater, sample water from the "pits of death" with Niskin bottles, and map and sample the sulfides/alteration zone in the southern end of the west pit crater. If time allowed, we would map and explore the large fissure extending from the east pit crater, as only the eastern part of this fissure was observed on dive P5-107. Sansone would test his hydrogen sniffing device.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The tracking system did not work. One of the propulsion motors was failing which caused us to abort the dive early.

Still camera failed after approximately 10 photos.

Recommendations for corrective action or improvement:

The LRT system does not allow for preventative maintenance on site. The proposed ship should solve many problems, plus an overhaul of the sub. Less dives this season would help. How about an engineer?

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

No, we missed entirely what we were after. On the other hand, we found a hydrothermally active field with shimmering water from small chimlets - but we cannot be sure where it is.

Saw unique (layered) nontronites, but too delicate to sample.

List specimens or samples collected on the mission.

None. Chimlets and nontronites could not be recovered successfully with the collecting and retaining gear available.

## 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 P5-112  
(project title) held on 30 September 1988 (date) in the following way:

- a. CTD data by 30 September 1990 (date)
- b. voice transcripts, video, and still camera film  
by 30 September 1990 (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).

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Project Leader