

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-181

MISSION STATUS

Location: Loihi
Mission Date: Sept. 6, 1991
Maximum Depth: 1600 meters
Project Title: Geology of Loihi
Project Leader: Alexander Malahoff
Address: HURL
University of Hawaii
MSB 319
Honolulu, HI 96822
Phone: 956-6811
Observers: Kevin Kelly, Max Cremer
Address: HURL
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Honolulu, HI 96822

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

Objective of the dive was to drop over the west flank of Loihi seamount, look for possible traces of of OBS #1, survey the western flank being the site of massive mass wasting, and finally to sample Pele's Vents once again. The usual techniques were applied, video, photo, manipulators, voice act. recorder. Outstanding findings of the dives was the discovery of a new hydrothermal field at 1240m depth on the west flank of Loihi. The coordinators on the OTR grid are C'15/C'16. The new vent field is in size and activity easily comparable to Pele's Vents.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

PISCES V was operating 100% functional.

Recommendations for corrective action or improvement:

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

Even though we did not locate any traces of OBS #1, I feel that the mission was more than accomplished with the new discovery. Numerous samples were taken from the new hydrothermal field as well as Pele's Vents.

List specimens or samples collected on the mission.

NEW VENTS #:	P5 181/1-9	All basaltic fragments
PELE'S VENTS #:	P5 181/10-18	with residual nontronite.

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 Geology of Loihi
(project title) held on Sept. 6, 1991 (date) in the following way:

- a. CTD data by none (date)
- b. voice transcripts, video, and still camera film
by Sept. 6, 1993 (date)
- c. other Sept. 6, 1993 (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