

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-180

MISSION STATUS

Location: ca. 6 mi. off Honuapo fault system
Mission Date: 4 Sept. 1991
Maximum Depth: 1700 meters
Project Title: Geology of Loihi
Project Leader: Alexander Malahoff
Address: University of Hawaii
HURL
MSB 319

Phone: 956-6802
Observers: Maximilian Cremer, Amy Bayler
Address: University of Hawaii
HURL

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

Objective of the dive was to survey a fault system that strikes appt. North-South and shows a vertical displacement of ca. 500 m. We were to investigate it. This fault consists of one single drop (wall) or of a succession of normal faults. The latter proved to be true. The system consists of a series of ca. 30 single steps, the offsets being quite regular. We used video, photo, and manipulators to survey and sample the area. Two samples of presumably tholeiitic, olivine-rich basalt were taken, one at the bottom and one at the top of the fault.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The dive was very successful, to my knowledge all essential systems were working.

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.

The mission was a fine success. Objectives and accomplishments matched.

List specimens or samples collected on the mission.

P5 180/1 1600 m. - tholeiitic basalt
P5 180/2 1250 m. - same, part of outer shell of a pillow
basalt.

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 4 Sept. 1991 (date) in the following way:

- a. CTD data by --- (date)
- b. voice transcripts, video, and still camera film
by 4 Sept. 1993 (date)
- c. other 4 Sept. 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