

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO.P5-144

MISSION STATUS

Location: Loihi
Mission Date: 1 April 90
Maximum Depth: 1050 m
Project Title: Loihi Vent Chemistry
Project Leader: G. McMurtry
Address: U.H. Marine Geochemistry
1000 Pope Road MSB 325
Honolulu, Hawaii 96822
Phone: (808) 948-6858
Observers: Peter Sedwick, E. Murphy
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Scientific Data Acquired : Prepare an abstract outlining your objectives, techniques, findings, etc.

The dive objective was to obtain hydrothermal fluid samples from Pele's vent field on Loihi Seamount. A paired Ti Walden sampler, two single Waldens, and a Nisken sampler were used successfully. The 0-99 ° C thermistor was used to measure the temperatures of the vents before and after sampling. The CTD with extended inlet was used to sample one vent for T^o, S^o/_{oo}, & O₂. One rock sample with sulfur and oxide coating was taken.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Panasonic video camera did not work. The rest of the equipment worked flawlessly!

Recommendations for corrective action or improvement:

Unknown

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

YES! Vent samples were successfully taken. Temperature readings were successfully taken.

List specimens or samples collected on the mission.

- 2 single Walden samples ~500 ml. each
- 1 double Walden = 2 samples ~500 ml. each
- 1 Nisken bottle ~2.5 L. sample volume
- 1 basalt ~ 1 Kg. with sulfur & oxide & mat coating.
- thermistor and CTD Data

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 P5-144
(project title) held on 1 April 1990 (date) in the following way:

- a. CTD data by 1 April 1991 (date)
- b. voice transcripts, video, and still camera film
by 1 April 1991 (date)
- c. other 1 April 1991 (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