

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-231

MISSION STATUS

Location: Cross Seamount, 1985 meters
18°44.2'N, 158°11.9'W

Mission Date: August 3, 1993

Maximum Depth: 2000 meters

Project Title: Microbial Geochemistry of ferromanganese crusts

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

Dive objectives: (1) deploy short term experiments (2 month) at 1300 and 1985 meters, and to retrieve 2 year deployment experiments from 1300 and 1985 meters. (2) To sample Fe-Mn rocks from dive sites.

Techniques: Experimental rocks contain plates of minerals which serve as settlement/mineral dissolution sites. Time and depth are two variables investigated - e.g. how fast (rate) are carbonates dissolving and Mn & Fe oxides precipitating; and the growth rate of various forams.

Findings: To be determined by Scanning Electron Microscopy.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Took several hours to locate first site (1985 meters) in part because communications with surface were difficult. Therefore we ran out of time to transit to the second site.

Recommendations for corrective action or improvement:

Probably would not deploy trays so far apart.

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

Most of the objectives were met. We replaced the transponder at 1985 meters with a fresh transponder, retrieved 2 year deployment experiment from 1985 meters, obtained a FeMn crust sample. Finding the first site was of primary importance.

List specimens or samples collected on the mission.

FeMn crust sample from 1985 meters.

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 P5-231; Microbial Geochem. of FeMn crusts (project title) held on August 3, 1993 (date) in the following way:

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