

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-096

MISSION STATUS

Location: Cross Seamount
Mission Date: 19 Aug 1988
Maximum Depth: 750 m.
Project Title: Microbiol. Geochemistry of Cobalt-Rich
Ferromanganese Crusts
Project Leader: G. Taylor/J. Cowen
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Observers: G. Taylor, H. Millard
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Scientific Data Acquired : Prepare an abstract outlining your objectives, techniques, findings, etc.

Objective: Test hydraulic coring device and core recovery system at depth. Recover cores from Cross Seamount and return to surface uncontaminated.

Techniques: Coring device - Stanley DL08 hydraulic drill designed for work at depth. Coring Bit - specially modified diamond edged coring bits 1 - 1 1/2 in. diameter. Core Recovery System - specially designed Nalsene 1-1 containers charged with sterile seawater and preservative with spring-loaded trapdoors.

Findings: We recovered pebbles and a rock after we destroyed one coring bit and were unable to mount the backup because the chuck came loose.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Compass was repaired. No compass, one camera inoperable, main camera didn't fire reliably and video would shut itself off. Our system has to be modified to accommodate the reach of the manipulator. Our mission failed this time.

Recommendations for corrective action or improvement:

Give the crew some downtime for repairs and fine-tuning.

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

Yes, again we recovered fewer samples than desired, but we did get good samples and learned more about how to modify our sampling system.

List specimens or samples collected on the mission.

3 pebbles }
1 rock } Mn crust loaden

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 "Microbiol. Geochemistry of Cobalt-Rich Ferromanganese Crusts" (project title) held on 19 Aug 1988 (date) in the following way:

- a. CTD data by 1 Sep 1988 (date)
- b. voice transcripts, video, and still camera film by 1 Sep 1988 (date)
- c. other 1 Sep 1988 (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