

HAWAII UNDERSEA RESEARCH LABORATORY  
QUICK LOOK REPORT MISSION NO. P5-095

## MISSION STATUS

Location: Cross Seamount  
Mission Date: 18 August 1988  
Maximum Depth: 480 m.  
Project Title: Microbiol. Geochemistry of Cobalt-Rich  
Ferromanganese Crusts  
Project Leader: Gordon Taylor/James Cowen  
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Observers: G. Taylor/T. Ingleduc  
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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 successfully recovered a core from our first attempt - fantastic! We recovered pebbles in our recovery system after we destroyed our bit.

## MISSION EVALUATION:

Limitations, failures, or operational problems noted:

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.

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.

I consider the dive a great success! We obtained fewer samples than desired, but we learned a great deal about how to improve our system and we proved that our project is conceptually sound.

List specimens or samples collected on the mission.

1 core	}	
4 pebbles	}	Mn Crust loaden
1 rock	}	

## 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 completion - "Microbiol. Geochemistry of Cobalt-Rich Ferromanganese Crust (project title) held on 18 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).

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Project Leader