

HAWAII UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT MISSION NO. P5-201

MISSION STATUS

Location: Penguin Bank - South Side

Mission Date: July 29, 1992

Maximum Depth: 605 meters

Project Title: Carbonate Geochemistry

Project Leader: F.T. MacKenzie

Address: University of Hawaii
Dept. of Oceanography
1000 Pope Rd. MSB 525
Honolulu, HI 96822

Phone: (808) 956-5963

Observers: C. Allen, M. Bertram

Address: University of Hawaii
Dept. of Oceanography
1000 Pope Rd. MSB 511
Honolulu, HI 96822

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

Deployed experimental racks, collected water in Niskin bottles and sediment in sediment scoopers at two depths, 300 and 600 meters. Water chemistry (+CO₂, alkalinity) will be used to evaluate seawater sat. State w.r.t. calcite; aragonite. These data will be compared with solid phase dissolution features observed on experimental plates after 6 weeks exposure (plan to retrieve these trays in Sept. 1992). CTD/O₂ data were also to be taken.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Sub-tracting system was inoperative, although fixes were obtained by other means. Battery power limited the length of the dive - we spent a good deal of time driving from our initial deployment site (150 m water depth) to our experimental site at 300 m. Also, could not pick up the pinger signal on the bottom as we tried to relocate the site at 300 m.

Recommendations for corrective action or improvement:

None

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

Yes; the real test will be in six weeks at the conclusion of the experiment. Can we find the trays again?

List specimens or samples collected on the mission.

Water samples taken
Sediment samples taken
1 sponge and 1 sea anemone (for HURL examination)

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 P5-201
(project title) held on July 29, 1992 (date) in the following way:

- a. CTD data by July 1994 (date)
- b. voice transcripts, video, and still camera film by July 1994 (date)
- c. other July 1994 (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