HAWAI'I UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT (QLR) for *Pisces* and *RCV-150*

DIVE: _P4-166_____
(*Extend length of sections as needed/appropriate*)

MISSION STATUS

Location: ___Hilo 335 m reef_____

Latitude: ____19_° _52.249'_N____ **Longitude:** _154_° _56.895'_W____

Mission Date: ___15 October 2006___ **Duration:** _7_ hours _56_ mins

Maximum Depth: __352__ meters

Project Title: ___Low Sea-level Reefs off Hilo_____

Principal Investigator: __Dr. Donald Potts_____

Address: _ Institute of Marine Sciences_____
A316 Earth & Marine Sciences Building
University of California, Santa Cruz
Santa Cruz, CA _95064_____

Phone: ___(831) 459-4417_____

Observer 1: ___Donald Potts__
Address: UCSC (as above)
_ ___
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Observer 2: ____N/A
Address: _____
__ _____
__ _____

Pilot 1: _Steve Price_____

Pilot 2: _Terry Kerby_____

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

Objectives: Sample fossil reef for age dating and paleo-environmental assessment.

Observations, findings, etc: Surveyed high backscatter features between rising to 335 m depth from sedimentary surfaces down to 252 m. Consisted of two main carbonate reefal structures: the slightly deeper southern one was separated by a narrow channel about 8 m

deep with vertical walls on the western side, and evidence (moving dunes of coarse, sediments) of strong currents running from north to south between them. Both appear to be fossil reef structures with smooth surfaces on top and to seaward, but covered with sediments to landward.

A smaller high backscatter feature lying eastward and parallel to the main feature appears to consist of similar but slightly lower reefal structures about 5-8 m below the top of the main feature

Observed Species list: N/A geologic specimens

MISSION EVALUATION:

Limitations, failures, or operational problems noted: None

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:

Pending lab examination and analysis, we have collected substantial amounts of material that should be suitable for characterizing the composition and age of the 335 m drowned reef.

List specimens or samples collected on the mission:

18 carbonate samples were collected from the two main structures and from the base of the wall in the channel between them the main structure