HAWAI'I UNDERSEA RESEARCH LABORATORY
QUICK LOOK REPORT (QLR) for *Pisces* and *RCV-150*
DIVE: P4-214

(*Extend length of sections as needed/appropriate*)

MISSION STATUS

Location: South of Pearl Harbor, Oahu, Hawaii

Latitude: 21° 12.60' N **Longitude:** 157° 58.60' W

Mission Date: 11Mar09 **Duration:** 5hours 0 mins

Maximum Depth: 530 meters

Project Title: Hawaii Undersea Military Munitions Assessment (HUMMA)

Principal Investigator: Margo Edwards

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Observer 1: Wendy Smith **Observer 2:** Sonia Garcia

Address: ECBC **Address:** Environet, Inc.

Pilot 1: M. Cremer **Pilot 2:** N/A

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

Objectives: Survey speckle trails for DMMs and collect a sample suite with each submersible. The Pisces IV survey path covers two speckle trails that we have not previously visited. The first trail trends due north, so we are beginning at the southern end and assuming that morning currents will push Pisces IV in a northerly direction. This trail intersects with another one that trends to the east. We have not been in this area for long, so we have not yet had a chance to detect any potential chemical munitions. Pisces V will also be searching for chemical DMMs,

slightly to the south and east of Pisces IV, and if either submersible finds a field of likely targets, the other submersible should head to the same general area for more sampling – priority now needs to be given to sampling around DMMs, hopefully those that appear to be chemical, but if no chemical targets are identified, then sampling should take place around conventional munitions.

Observations, findings, etc:
Both submersibles had to deal with a very strong bottom current and low visibility today. Despite that fact, Pisces IV managed to survey the northern half of the speckle trail that it was sent to, and then turn back to the south and collect an almost full sample suite. The sample was collected in a long trail of acetylene bottles, and pictures taken of Pisces IV by
Pisces V show that the former sampled in close proximity to numerous hazards. One particular bottle appeared to be breached and was "standing" on stalactites formed by material that had leaked out of the housing.

Observed Species list:
To be completed upon review of the video by a biologist.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:
Pisces IV lost one sediment sample today due to a broken handle. Their push core also failed because of the hard coral substrate in which they were sampling.

Recommendations for corrective action or improvement:
Given the sampler failure at the Pisces IV site and the extra space in the milk carton for sediment samplers, we should probably pack 8 or 9 sediment samplers for future dives if this doesn't make it more difficult for the pilots.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished:
The submersible achieved its mission, which is outstanding considering the strong current and low visibility that both submersibles faced today.

List specimens or samples collected on the mission:
Marker HUMMA14: 12:21 21° 12.694' N; 157° 57.58.0' W (DMM in non-dredge #2)
7 sediment samples
2 water samples (collected by Pisces V)

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 (Project title):

Hawaii Undersea Military Munitions Assessment (HUMMA)
Held on 12Mar09 (date) in the following way:

a. CTD data by ____31Dec09_____ (date)
b. Video and images by _____31Dec09_____ (date)
c. Other _____31Dec09_____ _ (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).

Margo H. Edwards, electronic signature dated 12Mar09
Principal Investigator