

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-398

MISSION STATUS

Location: *Loihi Seamount - Pele's Pit*

Mission Date: *10-12-98*

Maximum Depth: *1328*

Project Title:

Principal Investigator: *Frank Sansone / James Cowen*

Address:

Phone:

Observer 1: *Nathan C. Becker*

Observer 2:

Address: *Department Geology
and Geophysics
University of Hawaii*

Address:

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

The primary objectives were to:

- 1) recover Jim Cowen's bio-tower sampler
- 2) collect hydrothermal fluids from three sites
- 3) with Ti-major samplers and vialen bottles
- 3) Collect sulfide / sulfate deposits
- 4) Collect microbial mats with "spooze gun"
- 5) Adjust / reposition osmotic samplers and analyzers
- 6) Investigate terrain E of study area

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

lower riskin bottle triggered prematurely

Recommendations for corrective action or improvement:

reposition riskins to starboard side of basket

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

All goals were achieved with the exception of the collection of one riskin sample. In addition, a previously uninvestigated vent site was sampled for microbial mats.

List specimens or samples collected on the mission.

see attached sheet

Dive 398

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

TEMPORAL EVOLUTION OF CO₂ HI (project title)

held on 10/12/98 (date) in the following way:

- a. CTD data by 10/12/00 (date)
- b. voice transcripts, video, and still camera film by 10/12/00 (date)
- c. other 10/12/00 (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).

 Principal Investigator

PISCES SAMPLE LOG -- Loihi Cruise -- October 1998						
Dive #: 398					Date of Dive: 10/12/98	Observer(s): Nathan Becker
Time	Location	Depth	Nav Fix	Sample type	Sampler ID	Comments
1043	Marker 20	1311				Osmo sampler adjusted, trap#12 is orange; 51 deg C
1058	Marker 11	1302				Osmo analyzer repositioned; 163 deg C
1122	Marker 11	1302		sediment scoop	1	
1132	Marker 11	1302		sediment scoop	5	visible flow; 45 deg C
1132	Marker 11	1302		rock		put in temp probe holster
1150	Lower Jet Vents	1297		sediment scoop	4	166 deg C
1205	Upper Jet Vents			Ti-major sampler	silver	
1243	Marker 15	1289				high temp MTR deployed; vent temp is 166 deg C
1306	Marker 15	1289		Ti-major sampler	green	
1316	Marker 15	1289		Ti-major sampler	blue	
1337	Marker 15	1289		rock		in basket
1339	Marker 15	1289		sediment scoop	2	taken from vent orifice
1355	Marker 15	1289		Spooge Gun	1-4	
1405	new site E of Marker 15	1290		Spooge Gun	5-6	113 deg C
1429	Marker 10			Bio-tower		flowmeter reading: 29.0 gal
	Marker 10			Bio-tower		temp at top of tower: 2 deg C (ambient)
	Marker 10			Bio-tower		temp in sand ~60 cm away, 20 cm deep: 84 deg C
1435	Marker 10			Bio-tower		placed in basket
1444	Marker 10					temp at tower site: 145 deg C
1459	Marker 10			Ti-major sampler	black	taken from vent that was under the tower skirt
1511	Marker 10			niskin bottle	upper	