

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-340

MISSION STATUS

Location: Pele's Pit, Loihi

Mission Date: Sept.19, 1997

Maximum Depth: 1327 m.

Project Title: In-situ Gamma Spectroscopy in Loihi Seamount

Principal Investigator: David Kadko

Address: University of Miami
RSMAS/MAC
4600 Rickenbacker Causeway
Miami, FL 33149

Phone: (305)361-4721

Observer 1: Brian Midson

Observer 2:

Address: Dept. of Oceanography
1000 Pope Road
University of Hawaii
Honolulu, HI 96822

Address:

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

David Kadko's Gamma detector was recovered.

2 Lupton - gas tight samples were taken at "Jet Vents" 1296 m.

2 ti - major samples were taken at "Jet Vents".

Craig Moyer's shrimp trap was recovered, filled with mostly amphipods and some shrimp.

1 sediment scoop was filled with SO₄ "/S" crust from "Jet Vents".

Craig Moyer's bacteria trap #5 was recovered, lost on surface.

Rock #1 was plucked from "Big boulder" 1276m, N-slope.

1 sediment scoop was filled with sand at 1327 m.

Geoff Wheat's osmo-sampler was deployed at 1302 m., 194°C vent.

Craig Moyer's bacteria traps #10, #12 were deployed at marker #20, 1311 m., 107°C vent.

Sediment scoop was taken at Marker #42, Kadko's area.

Rock #1 - site #42 pillow near Kadko's instrument.

Rock #2 same as above.

The sediment was probed at a T°C of 40°C.

Bacteria trap #3 was deployed at marker #19.

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.

The dive was completely successful.

List specimens or samples collected on the mission.

See first section

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

In-situ Gamma Spectroscopy (project title)

held on 9-19-97 (date) in the following way:

- a. CTD data by 9-19-99 (date)
- b. voice transcripts, video, and still camera film by 9-19-99 (date)
- c. other 9-19-99 (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 -- September 1997					9/21/97	
Dive #:	340			Date of Dive:	9/19/97	
				Observer(s):	Brian Midson	
Time	Location	Depth	Nav Fix	Sample type	Sampler ID	Comments
912	bottom, inside pit	1136				
938	marker 18	1104				
1009	N-slope of pit	1276		rock	big boulder	Sulphide glistening sub-sized boulder
	bottom of pit	1327		sed scoop	scoop #10	silt-sand ripples grey color
1130	marker 11	1302		Osmo deploy	osmo #4	194 C vent
1138	Jet Vents	1298		rock	#2	SO ₄ /S= crusted rock
1149	Jet Vents	1296		sed scoop	#7 (#9 transfer	cap dislodged, lost
1154	Jet Vents	1296		gas tight	Lupton #2	upper jet
1158	Jet Vents	1296		gas tight	Lupton #7	lower jet
1208	Jet Vents	1296		major	major green	upper jet
1217	Jet Vents	1296		major	major black	lower jet
1308	marker 19	1308		bacteria trap deploy	#3	
1327	marker 20	1311		bacteria trap deploy	#10	107 C vent lower
1336	marker 20	1311		bacteria trap deploy	#12	107 C vent upper
1340	downslope from #20	1312		bacteria trap recover	#5	lost at surface
1357	marker #42	1312		shrimp trap		full of amphipods and some shrimp
1400	marker #42	1313		rock		Pillow formation
1414	marker #42	1312		sediment	scoop #2	layered formation
1415	marker #42	1312		temperature		40 C sediment probe
1433	marker #42	1312		rock		second rock from pillow
1434	marker #42	1312		temperature		10 C sediment at base of pillow