

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-644 Date: July 4, 2005
 Observer 1: Steve Price PIT
 Affiliation: HURL sub ops. Dive Location: Vailulu'u Volcano, Samoa
 Observer 2: Stan Hart Latitude: 14° 12.861
 Affiliation: _____ Longitude: 169° 03.631
 Purpose: Research Training Test Time of Dive: 0810
 Other: _____ Time of Surface: 1639
 Special Equipment: _____ Time Submerged: 8:46
 Cameras: Sony, ROS Time Thru Last Dive: 4293:02
 Manipulators: Titan, HYCO Total Time to Dive: 4301:48
 Samplers/Sensors: Bio box, Rock box, Sediment Dive Depth: 973m
scoops, CTD, Water Depth: 973m
 Support Vessel: R/V Kaimikai-O-Kanaloa Water Temperature: 6.7°C
 Captain: Ross Barnes Visibility: _____

Dive Results/Remarks: Eel trap exchange on Nafanua summit and survey crater floor for hydrothermal activity. Recover current meter. 0902
Land on a steep rocky bottom in 752m on west slope of Nafanua. Vis. 2m.
Move upslope to the east. 0923 726m locate an area of thick bacterial mat. 13.8°C
0935 711m at eel city south. 0941 At marker #4. 0945 Recover temp probe. Inspect traps. No
eels in traps. Deploy new traps. 1013 Survey Pinnacle to the N. (Eel City North) The Nafanua
summit has two main pinnacle features both inhabited by eels. 1034 913m Dropped back down the
cone to the SE in mid water. Visibility is 2 meters. Move to the southeast into the basin.
Discover many dead animals in all stages of decomposition. Eels, shrimp, fish. The bottom is littered
with dead sealife. Move to the eastern edge of what we are calling the basin of death.
1246 986m. Near the bottom of the main basin. Into an area of thick active bacterial mat. Observe
clear areas in the thick mat that appear to be brine pools of denser water with chunks of flob
floating on them. This area is on the west side of the basin which is the east flank of Nafanua.
Move to the northwest into the area between nafanua and the NW caldera wall.
Intend to investigate the site of possible hydrothermal activity but the decision to
move back up the nafanua cone is made in order to check on eels in the traps.
1333 Move up the NE flank of Nafanua. 1405 708m at marker #4. Eel traps are empty.
1417 Move in mid water to the north west to get to the NW breach to
recover the current meter. 1447 753m Move to NW. Come on to marker #1 and current
meter as we approach the breach. 1510 Deploy charges 113 & 114. Recover current meter.
Recover charge 105. 1516 Move back down wall to try to get to area of suspected
hydrothermal activity. 1543 864m Land on a steep slope after descending a
 Equipment Deficiencies: Vertical wall. Leave the bottom from 864m.

Pilot's Signature: Terry Kerby Date: 7/27/05
 Operations Director: Terry Kerby Date: 7/23/05