Rev. 10-22-04

PISCES IV DIVE REPORT

Pilot: Terry Kerby Dive #: PIV-160 Date: October 7, 2006

Observer 1: Colin Wollerman

Affiliation: HURL Sub ops PIT. Dive Location: Loihi - Pit and East Pit

Observer 2: James White Latitude: 18°54.402' N

Affiliation: University of Otago, New Zealand Longitude: 155°15.727' W

Purpose: (Research) (Training) Test Time of Dive: 0805

Other: Time of Surface: 1721

Special Equipment: Time Submerged: 9:16

Cameras: Sony - ROS Time Thru Last Dive: 1147:31

Manipulators: Orion - HYCO Total Time to Dive: 1156:47

Samplers/Sensors: CTD-DO, Sediment scoops, core samplers, Bio Box, Sample Box Dive Depth: 1326m

Water Depth: 1326m

Support Vessel: R/V Kaimikai-o-Kanaloa Water Temperature: 3.3°c @ 1326m (in bottom of Pit)

Captain: Ross Barnes Visibility:

Dive Results/Remarks: Pete's Pit survey and hyaclastite sampling dive. 0923 1123m Land on a steep talus slope. Trim sub then move upslope to 1104m and contour towards the position of marker #18. 0953 1104m At marker #18. The area is undisturbed after the seismic swarm in Dec. 05. 1000 Begin descent into pit. 1026 1326m On the bottom of the pit. Flat rippled sand and some landslide debree boulders. Move upslope to the north east and contour to the SSE to the vent sites. Active venting at 1302m @ #36 on N side of wall near boiling pot vent site. 1310m at boiling pot site. Boiling Pot area has transformed into hundreds of small chimneys. Move upslope to the SE to tower vents area. Located nontronite chimney field on the slope going up to the spillway. 1119 1276m at marker #38. Diffused venting and thick bacterial matt. Move up spillway. Chimney fields in spillway. Move up and out of the pit to the East. Survey slump on feature south of East pit. 1241 1105m Collecting samples. Sample sites 1, 2, 3, 1503 1292m Collecting samples. 1549 Leaving bottom.

~~Equipment Deficiencies~~:

Pilot's Signature: Terry Kerby Date: 10/9/06

Operations Director: Terry Kerby Date: 10/9/06