

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-638 Date: June 16, 2005
 Observer 1: Steve Price PIT
 Affiliation: HURL Sub ops. Dive Location: Volcano V-19
 Observer 2: Gary Massoth Latitude: 24°48.073'S
 Affiliation: GNS New Zealand Longitude: 177°00.688'W
 Purpose: Research Training Test
 Other: _____ Time of Dive: 0803
 Special Equipment: _____ Time of Surface: 1645
 Cameras: Sony-ROS Time Submerged: 8:42
 Manipulators: Titan, HYCO Time Thru Last Dive: 4243:26
 Samplers/Sensors: BioBex, Rech box Sed Scoops Total Time to Dive: 4252:08
CTD Water Samplers (majors - Gastroguts) Dive Depth: 980m
 Support Vessel: R/V Kaimikei-O-Kenaloa Water Depth: 980m
 Captain: Ross Barnes Water Temperature: 5.8°C @ 980m
 Visibility: _____

Dive Results/Remarks: Survey Volcano cone on V-19 for source of hydrothermal activity. 0909 Land on a talus slope at 980 m. 0924 Move upslope to the NE. 0935 890m Contour to the north. 0948 890m in gully with fresh landslide rubble and altered rock fragments. 1015 Dropped back down the slope to survey the area for potential hydrothermal activity. More columnar basalt formations. 1017 970m Move back up the wall 1035 890m relocate gully with fresh debris and move upslope to the N. 1130 668m at WP#3 at the base of the wall. Move up the wall to the N. 1152 504m Locate a large area of venting iron oxide chimneys on the wall. Move into a position to get water samples. 79.2°C. Time consuming in clouds of bacterial mat from chimneys. Take major and gas tight water samples. Continue upslope to the North. 1340 416m on a ridge of venting iron oxide deposits. Move along a sharp ridge and discover numerous sulfide chimneys. Deploy marker #37. 1350 Land on the top of a large sulfide chimney at 384m. Temp. in chimney 245°C. Take water samples. Drop down wall to base of the chimney at 399m. Numerous smaller active chimneys on both sides of steep ridge around large chimney. Move up ridge to final waypoint position. 1600 415m on summit area at WP#8. Iron oxide crust and vents. 46.8°C. 1610 Leave the bottom from 415m.

Pilot's Signature: Terry Kerby Date: July 11, 2005
 Operations Director: Terry Kerby Date: July 11, 2005