

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-631 Date: May 14, 2005
 Observer 1: Steve Price
 Affiliation: HURL sub ops. PIT Dive Location: Brothers Volcano
 Observer 2: Julie Olsen Latitude: 34°51.439' S
 Affiliation: University of Alabama Longitude: 179°03.553' E
 Purpose: Research Training Test
 Time of Dive: 0807
 Other: _____ Time of Surface: 1646
 Special Equipment: _____ Time Submerged: 8:35
 Cameras: Sony-ROS Time Thru Last Dive: 4193:04
 Manipulators: Hyco-Titan Total Time to Dive: 4201:39
 Samplers/Sensors: Bia Box, Gast. ghts, Majors, Dive Depth: 1602m
Sed. Sccops, Rosette, Rockbox, GTD Water Depth: 1602m
 Support Vessel: R/V Kaimikai-O-Kanaloa Water Temperature: 3.1° @ 1602m
 Captain: Ross Barnes Visibility: 15-4m

Dive Results/Remarks: Exploration dive on Brothers Volcano hot well to relocate chimney gully for sampling and survey. 0916 1443m Land on a low angle sandy bottom above the well. Keep descent weights to descend the wall to contour depth. 0941 drop down the wall to 1571m. Release wts. 0950 Move East at 1584m then move up to 1570m and move west 1017 1573m in a sulfide gully. Collect samples. Temp in sulfide sediment is 28.7°C. No sclerling. Continue contour to the west. Continue contouring to the west at 1572m. Discover barnacles, mussels, and dead tube worms in an area of active venting. 1205 1571m at marker #21. Move west across the sulfide chimney gully. Locate active chimneys on west side of gully. 1213 1572m. At the base of a tall sulfide chimney sampling a hot smoker about 1m high with a well formed beehive deposit on top. Collect samples from beehive. Collect water samples from vent. Vent temp. 290.8°C. Deploy marker #27 at sample site. Move down slope to locate the base of the sulfide gully. Many tall chimney structures. 1584m is the base of the gully. Move west and
 -Equipment Deficiencies: discover an area of extensive diffused venting and rock formations covered with barnacles, mussels, and tube worms. Deploy marker #28. Move up slope to explore extent of biota. 1512 1547m Animal coverage on wall thinning out at this depth. 1512 Leave the bottom from 1547m.

Pilot's Signature: Terry Kerby Date: 5/24/05
 Operations Director: Terry Kerby Date: 5/24/05