

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-632 Date: May 15, 2005
 Observer 1: Max Cremer
 Affiliation: HURL sub ops Pilot Dive Location: Brothers Volcano
 Observer 2: Mark Slattery Latitude: 34°51.419'S
 Affiliation: NURP Mississippi Longitude: 179°03.454'E
 Purpose: Research Training Test
 Other: _____ Time of Dive: 0829
 Special Equipment: _____ Time of Surface: 1702
 Cameras: Sony-Ros-Digital Data Cam Time Submerged: 8:33
 Manipulators: Titan 7f - HYCO Time Thru Last Dive: 4201:39
 Samplers/Sensors: Bio Box, Rock Box, Rosette,
Bio Reactor, Total Time to Dive: 4210:12
 Support Vessel: R/V Kaimitai-O-Kanaloa Dive Depth: 1588 m
 Captain: Ross Barnes Water Depth: 1588 m
 Water Temperature: 3.3°C @ 1403
 Visibility: 10-5m

Dive Results/Remarks: Exploration dive to survey and sample hydrothermal vent systems on Brothers Volcano. A strong current sets the sub up slope from the intended landing site. Due to lower battery capacity we do not power in mid-water to maintain landing site position, but end in 1403m at 6943 on a low angle sandy slope at the top of the wall. We do not release descent weights but use the weight to descend down the wall to contour depth 1020. Descend down the wall to 1582m. Land in a sulfide gully. Load bellast rocks before jettisoning drop wts. Collect sulfides with sediment scoop. 1109 Contour to the west. 1127 1585m in the sulfide chimney gully. Continue to the west. 1157 1584m Locate marker #28. Temperature at marker is 4.3°C. Collect mussels and barnacles. Collect tube worms. 1253 1538m Moved up slope from tube worm site. 1307 1585m. Moved back down the wall looking for a sight to collect a bio reactor sample. 1327 1587m Locate more active chimneys west of marker #28. Temp. 18C. 5°C. Deploy marker #29 to mark new chimney site. Trip riser bottle sample and close water scoop samples. 1405 move beyond marker #28 to the East. It is approximately 20m from #28 to the East to get to the base of the sulfide chimney gully. Many chimneys but most inactive or difficult to get to or are too hot for the bio-reactor sample. 1434 1588m Moved back to the West to marker #29. Set up for bio-reactor sample. Collect a small sulfide chimney. Complete taking the bio-reactor sample. 1325 Leave the bottom from 1588m Make a normal recovery

Equipment Deficiencies: None

Pilot's Signature: Terry Kerby

Date: May 23, 2005

Operations Director: Terry Kerby

Date: May 23, 2005