

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-621 Date: April 18, 2005  
 Observer 1: Colin Wollerman  
 Affiliation: HURL sub ops - PIT Dive Location: Volcano "W"  
 Observer 2: Ten Wright Latitude: 31° 51.891' S  
 Affiliation: NIWA New Zealand Longitude: 179° 11.245' W  
 Purpose: Research Training Test  
 Other: \_\_\_\_\_ Time of Dive: 0810  
 Special Equipment: \_\_\_\_\_ Time of Surface: 1628  
 Cameras: 205-sony-DSP/L still Time Submerged: 8:18  
 Manipulators: Titan, HYCO Time Thru Last Dive: 4118:11  
 Samplers/Sensors: Bio box, Rosette, sediment Total Time to Dive: 4126:29  
scoop, CTD, Gastight, majors, Temp probe Dive Depth: 1299 m  
 Support Vessel: R/V Kaimihai-o-Keneloa Water Depth: 1299 m  
 Captain: Ross Barnes Water Temperature: 3.5° @ 1299m  
 Visibility: 15m

Dive Results/Remarks: Exploration dive to survey south and north  
calderas and cone on volcano "W" and collect biological  
and geological samples. 0923 Land in steep rugged basalt terrain  
in 1299m. 0942 Move upslope to the north. 0954 1293m Collect a rock  
sample. Continue moving to the NW. 1054 1165m Moved up steep  
walls of pillow formations to an area where we see remains of a vent  
field mussel community. Piles of mussel shells and signs of old hydrothermal  
altered rock. We discover about 10 live tube worms and collect 2. Temp.  
in bottom is ambient. 1107 Continue to the NW. Ascending rugged vertical  
walls. 1209 1052m Locate some live bacterial mat in weak diffused venting. Vent  
temp 8.9°C. Collect mat. 1230 Continue to the NW. 1245 1028m Move to NNE to  
 waypoint # 7. Begin descent into North Caldera. move downslope over rugged pillow  
 formations. 1346 1165m Moving across caldera floor towards cone in North Caldera.  
1348 moving up the flanks of the cone to the west. 1359 1047m. Into thick active bacterial  
 mat. Take rosette samples bottom temp 28.0°C. Move upslope to summit. Discover  
 that there is a pit crater in the top of the cone. 1424 Descend into crater. Locate active vents  
Equipment Deficiencies: in bottom of crater. 10.0°C. Take major sampler. 1445 Move  
 out of crater. 1456 on rim of crater in cone summit area at 1031m. Deploy marker #13.  
Collect a rock. Conduct a perimeter survey of the cone at 1045m to define boundaries  
 of hydrothermal vent activity. 1523 1044m Leave the bottom.

Pilot's Signature: Terry Kerby Date: 4/24/05  
 Operations Director: Terry Kerby Date: April 24, 2005