

PISCES V DIVE REPORT

Pilot: Terry Kerby Dive #: PV-616 Date: April 12, 2009
 Observer 1: Colin Wollerman
 Affiliation: HURL sub ops. Dive Location: Macaulay Volcano,
 Observer 2: Gary Massoth Latitude: 30° 12.5 '6' S
 Affiliation: NZ GNS Longitude: 178° 27.655' W
 Purpose: Research Training Test
 Other: _____
 Special Equipment: _____
 Cameras: Sony-ROS-DSP
 Manipulators: Titan, HYCO
 Samplers/Sensors: Bia Box, CTD, M2501S, G2519
 Support Vessel: R/V Kaimikai-O-Kenaloa
 Captain: Ross Barnes Water Temperature: 8.7°C
 Visibility: Clear vis on outside of cone.

Dive Results/Remarks: Search for hydrothermal vent activity on the
Macaulay Volcano Cone. 0845 Land on a steep talus slope
on the north side of the cone in 527m. Very clear visibility.
Move upslope to the south. 0923 446m. Green headed pel. 0952 345m
collect a sediment scoop of iron oxide crust. Continue upslope to the
SSR. 1002 Collect metalliferous rich rock. Getting into areas of mass
clam and mussel debris in channels. 1009 315m into live mussels
and clams with a large abundance of starfish eating the clams.
Collect starfish with mussels. Test temp in altered rock. 13.6°C.
1042 On rim of crater temp of 21° in bleached bottom with diffused venting.
1057 Move downslope to locate crater. Move around to east then backup
to north to a pinnacle feature that is on the rim of the cone. 1141 Collect gastropod
then drop into the crater. Vertical walls in a tube like structure 80m
across and about 100m deep. There is a gentle but constant outflow coming
Equipment Deficiencies: out of the pit. 1212 337m in bottom of pit. Ambient temp. 13.4
Temp in sediment 15.4. 58. Deploy meter #9. Take major and G2519K samples from vent site
at 336m temp 12.8°C. collect subside deposits. collect sediment scoops. survey pit and move up
n. wall. Move around cone to survey bio mass concentration at a depth of 290m. 1549 Leave the
bottom from 290m. Make a normal recovery.

Pilot's Signature: Terry Kerby Date: 4/13/09
 Operations Director: Terry Kerby Date: 4/13/09