

Jason Dive J2-229, August 24-25th, 2006 (GMT) Umbo

06:36 Off Deck

07:42 On Bottom: 3°43.00' S, 151°56.70'E, 2150 mbsl

12:24 Off Bottom: 3° 42.48'S, 151°56.34'E, 2092 mbsl

13:35 On Deck

MAGELLAN 06 Cruise Manus Basin

LEG 2

Aim:

The goal of the dive is to locate the hydrothermal vent on Umbo ridge responsible for the plume found in CTD cast MH-126. The main target is the major volcanic edifice on E Umbo Ridge and its flanks.

Vanko: The landing site was in sedimented sea floor. There were no Eh anomalies at all during the descent to the seafloor barring a steady, very slow downward drift of about 1%. We headed uphill to the north, toward the starting point of the ABE survey. We established a pattern in that region then, as ABE completed the first few line of its survey, we started a pattern into the area that ABE had just finished. At all times, we saw sedimented seafloor with occasional m-scale rocks and boulders. The sediments in places had curious troughs that looked like local down-slope slumps, and in other places there were low-relief ridges oriented downhill, resembling mega-dune-like bedforms. Biology was fairly abundant with fish, shrimp, brittle stars on the mud, many-armed stars on the rocks, holothurians, etc. Locally there were a few galatheid crabs usually associated with wooden detritus. During the whole watch we monitored Eh continuously and saw no hits. Nor did we see anything that appeared to have a hydrothermal origin.

Bach: Our track took us to the NW for 300 m to a E-W track line from the previous dive, then WSW across the summit of the edifice and extending to about 150 m E of the summit. We did not see anything but sediments and sedimented pillow and subordinate lobate and hackly flows. No Eh anomalies were detected either. We then decided to come up for 200 m and tow to a small mound on the N facing slope just north of the location on the E Umbo Ridge where the CTD cast had located a plume. Neither on our way nor at that location did we detect any Eh anomalies. The target area is a heavy sedimented pillow mound. We had to abort the dive for a 00:00 local time recovery.