Jason Dive J2-206, July 29, 2006

08:21 (GMT); 18:21 (Local)

10:09 – on bottom
23:54 – off bottom
01:16 – on deck

Aim: The dive was planned to investigate a new area to northeast of Vienna Woods. ABE data were collected and a map produced quickly to guide the dive. There were a number of sharp conical or slightly elongated features having the size and shape of sulfide chimneys or chimney mounds.

Landing coordinates:

- Lat/long: -3°4.20' S, 150° 26.20' E
- UTM: 9 660 328N, 215 077E (WGS84 Zone 56S)

Summary: Jason landed in a sedimented plain with fairly abundant infaunal features such as inverted mounds. On a heading of 032 a large solitary rock (virtual van number 14223) was sampled to determine its origin (Sample 206-1-R1). In the laboratory this was identified as volcanic pumice, presumably rafted in from elsewhere and sunk. After the sampling, Jason continued on across the sediment with only a little bit of platey volcanic rock evident. The sediment continued to have abundant pock marks presumably formed by infauna or, alternatively, as mini-sinkholes due to draining sediment down into the underlying pillowed terrain (assumed), as well as occasional fractures and occasional solitary rocks (presumably pumice). At 11:05 GMT a pillow flow front was encountered at the base of a pillow mound. At the top were areas with either some dark sediment and/or yellow features that were thought possibly to be bacterial (vv 14413 and 14473).

Farther along the traverse were more pillow mounds, more fractures, faults and little (e.g., 3 m-wide and 6 m-deep) grabens. By 13:30 GMT it was strongly suspected that the 30 m-high target in the ABE data was really just an artifact. Despite beautiful scenery featuring pillows, sedimented plains, faults and impressive fractures/grabens, there was no more evidence for hydrothermal features.

There is some Fe-oxide staining in pillow talus in virtual van frame 15084. A little while later, a pillow lava sample was taken at the top of a mound (Sample 206-2-R1; vv 15473).

Sample 206-3-R1 came from a solitary low mound (vv 15757) with an earthy texture and much Fe-oxide coloration, which was thought to possibly be a degraded sulfide mound. The outer surface of the mound was extremely soft and unsampleable. By reaching into the mound, a small sample was extracted. The excavation revealed a light-colored soft material in the interior of the mound (vv 15825).

A small trough in sediment (a meter or so wide, ten or so meters long, and a half meter or so deep; vv 16153) has sea cucumbers in the bottom with some dark debris, a “halo” of numerous light-colored infaunal mounds, and a big rock sitting in it at one end. Much speculation ensued about the nature of these features.

Sample 206-4-R1 is a pillow lava fragment from the top of a little pillow mound (vv 16229). Sample 206-5-R1 is a crust from a soft orange mound (no temperature anomaly measured; vv 16361). Sample 206-6-R1 is the large rock, later determined to be pumice, from the strange trough encountered near vv 16153 and 16469. Is this trough a seep of some sort?