

***Jason Dive J2-205, July 28, 2006***

10:02 (GMT); 20:02 (Local)

**Aim:** The dive was planned to investigate the western part of the Tufar 3 hydrothermal field where there is a magnetic anomaly, but no Eh and only very weak temperature anomalies.

**Landing coordinates:** 3° 6.95' S, 150° 21.55' E [UTM: 9655250N, 206 500E (WGS84 Zone 56S)]

**Summary:** Jason landed in the middle of the magnetic anomaly, which is centered over a relatively deep and flat part of the ridge axis flanked to the ENE, N, and NW by shallower terrain. In the deeper center the bathymetry shows small bumps/mounds and fractures oriented NE, parallel to the rift axis. The flat areas are sediment-covered pillow lavas, while the higher bumps are pillow lava mounds. The fissures are several meters across and up to about 10 meters deep. Some linear features were described as fault scarps and razorbacks.

At one site (target 7; X = 11775, Y = 11293, Z = -2589) at the base of a small fault, there were small (meter-high) Fe-oxyhydroxide chimneys (one completely disintegrated upon trying to sample it), and nearby there was yellow flocculent material in a fissured terrain (virtual van numbers 12752 to 12800). But other than this, despite a systematic survey that involved several transits back and forth across the grain of the rift valley, no further hydrothermal features were observed.

After the survey of the area of the magnetic low, the dive proceeded N to some elevated terrain that turned out to be more pillow lava, and then up onto the volcanic highland to the east. This, too, was dominated by pillow lavas. One sample of a representative pillow basalt fragment was taken (Sample J205-1-R1; vv number 13648). From here, the dive track turned back west to cross the magnetic anomaly again, and ended at a prominent conical pillow mound near the western end of the ABE survey area.

End of dive at 23:30 GMT