

Dive No.	K 218		Date	2001/09/17	
PI	Name		Affiliation		
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English	Hisayoshi YOKOSE		Department of Earth Sciences Faculty of Sciences Kumamoto Univ.		
Specialty	Geology				
Purpose	To investigate geological structure and petrological characteristics of western apron of Hualali				
Area	West off shore of Hawaii island				
Site	West Kona				
	Latitude	Longitude	Time	Depth	
Landing	19°42.6390 ' N	156°13.8748 ' W	9:57	3970 m	
Leaving	19°43.1973 ' N	156°12.4759 ' W	14:51	3019 m	
Dive Distance	2400 m		Deepest point	3970 m	
Dive summary	<p>In order to obtain geological information for mapping and for petrology of the lower bench of north Kona land slide area, dive K218 was conducted submarine western flank of Hawaii island on September 17, 2001. K218 traversed 2.4 km east from the base of the western slope of Hualalai ( -3970 m) and up to the highest place of the the lower bench (-3019 m).</p> <p>We observed various type of lava morphology, such as elongated pillow, bulbous pillow, aa lava, lobate flow and ropy textured lava during this dive. Within a single mound, lava morphology was observed to change according to the steepness of the slope. Steepest part of the mound are covered by elongated pillow lava and/or pahoehoe lobes. Gently dipping slop and flatted top of the mounds are mainly covered with bulbous pillows and pillow cones. This correlation between lava morphology and the slope angles of the basement may correspond to effusion rate of the lava flows. Morphological change of lava suggest that the pillow lavas may not be a single compound flow but has vents at the top of the each mound.</p> <p>On board descriptions indicate that these rock specimens are mostly picrites with abundant olivine phenocryst and glassy rind. Glassy rind has slightly altered to paragonite but no Mn coatings. It seems that the abundance of the olivine phenocryst in the lavas increases with increasing of the depth of sampling sites.</p>				
Payload	Sample basket, sample box, 4 push core samplers				
Visual Records	VTR1, Still Camera				
Sample	17 rocks, 1 push core				
Video highlights	(1)10:09: aa lava (2) 10:40: pillow cone (3) 14:02: pillow lobe with a hollow interior				
Key words	Hyaloclastite, picritic basalt, south Kona landslide				

