Dive No.	K 214	Date	2001/09/11
PI	Name	Affiliation	
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Specialty	Geochemistry			
Purpose	To investigate the vertical structure of southern flank of the Hana Ridge.			
Area	Off shore of Maui Island, Hawaii			
Site	Southern flank of the Hana Ridge			
	Latitude	Longitude	Time	Depth
Landing	20°28.14 ’ N	155°16.13’ W	9:31	4439m
Leaving	20°30.24 ’ N	155°15.96’ W	14:38	3127m

Dive Distance	3950m	Deepest point	4439m

Dive summary	The dive track was designed to investigate vertical sequence and a mound-like structure on the southern flank of the Hana Ridge. We landed at the bottom of the ridge flank to find sheet lavas. We ascended to the lower part of the ridge, and pillow lava outcrops and sediment-covered slopes appeared repeatedly from –4250m to –3400m. The rocks collected from each lava flow demonstrate that picrites and olivine basalts dominate below and above the depth of -4200m, respectively. After passing over a very gentle slope on the bench structure of the ridge, we observed a mound-like structure and found central sheet lavas and marginal pillow lavas on this mound. This therefore would be a small vent of a flank eruption. We encountered a steep cliff at the uppermost part of the ridge. No in-situ pillow basalts were recognized, rather the slope was covered by rounded blocks, suggesting that the uppermost part of the ridge is formed by erosional debris from subaerially erupted lavas that moved down on the submarine ridge.
Payload	Nine sample baskets, four push cores
Visual Records	VTR(Broadcasting grade), VTR(centre, right & left), still camera
Sample	Rock: 23 samples, Push core: 4
Video highlights	(1) 10:24-10:28 (2) 12:37-13:01 (3) 14:12-14:20
Key words	Hana ridge, Haleakala, pillow lavas, picrites