

Dive No.	K207		Date	2001/09/3	
PI	Name		Affiliation		
Japanese English	トーマス シッション Thomas W. Sisson		アメリカ合衆国地質調査所 US Geological Survey Menlo Park CA		
Specialty	Volcanology and petrology				
Purpose	Look for primary ancestral Kilauea volcanic deposits; examine structures related to Papa'u Seamount				
Area	SE of Papa'u Seamount				
Site					
	Latitude	Longitude	Time	Depth	
Landing	19 ° 01.00' N	155° 11.50' W	9:11	2936 m	
Leaving	19° 02.78' N	155° 12.44' W	14:32	2027 m	
Dive Distance	3700 m		Deepest point	2937 m	
Dive summary	<p><b>Purpose:</b> The frontal scarp of the 3000m deep Hilina bench exposes bedded volcaniclastic rocks derived from both shoreline entry lava flows and from a submarine alkalic progenitor of Kilauea volcano. No primary volcanic deposits had been discovered from ancestral Kilauea. The volcanic edifice must have lain northwest of the Hilina frontal scarp, and a site of steep slopes southeast of Papa'u Seamount offered the possibility of seeing primary deposits from ancestral Kilauea. That site also is situated close to a large north-northwest trending structure that bounds Papa'u Seamount on the west, and it was possible that dive observations would reveal the nature of this structure.</p> <p><b>Results:</b> Dive K207 landed at -2936m depth, 19° 1.0' N 155° 11.5' W on sandy bottom with scattered talus boulders. A push core (P1) and a talus sample (R1) were collected very close to the touch down point. The dive proceeded in a north-northwesterly direction diagonalizing up across the northeast walls of two small basins from -2930m to -2650m depth and from -2600m to -2100m depth. Steep, coarse talus mantles the slopes of both basins, with lesser exposures of massive, poorly indurated breccia. (continued on following pages)</p>				
Payload					
Visual Records					
Sample	28 rocks, 4 push cores				
Video highlights	(1)	(2)	(3)		
Key words	Kilauea, Hilina bench, breccia,				

