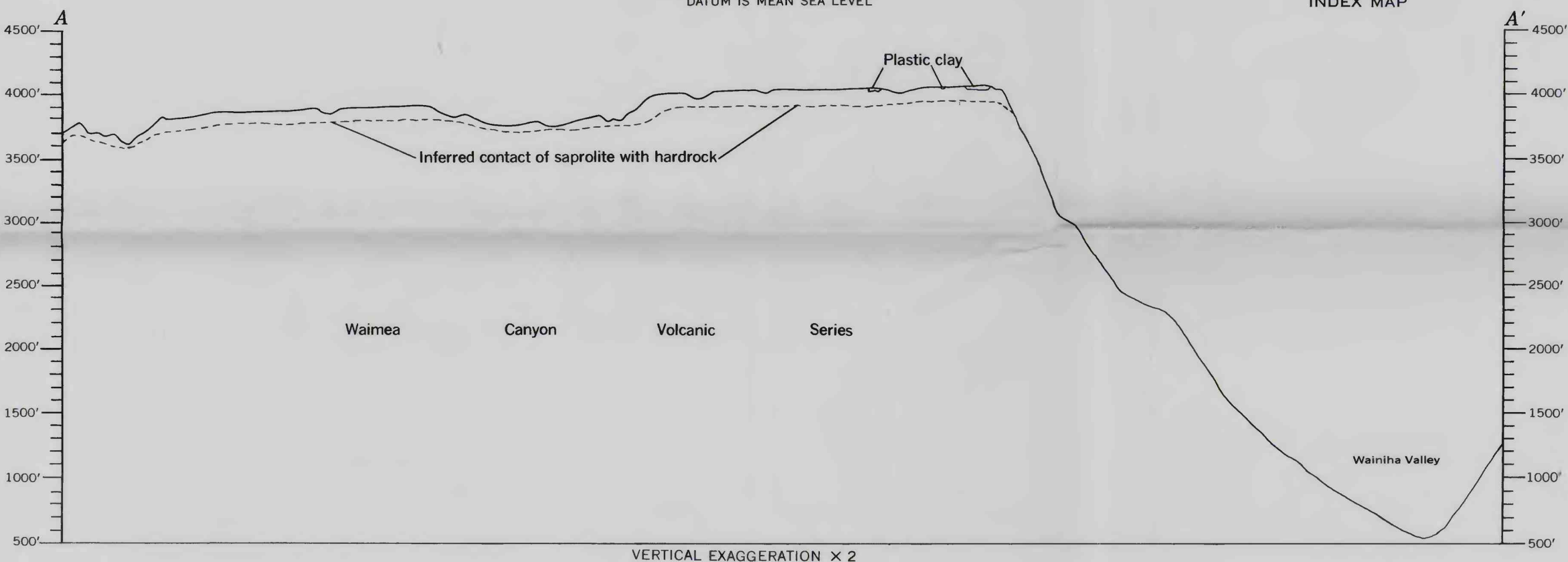
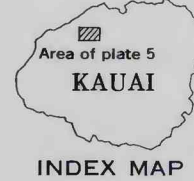
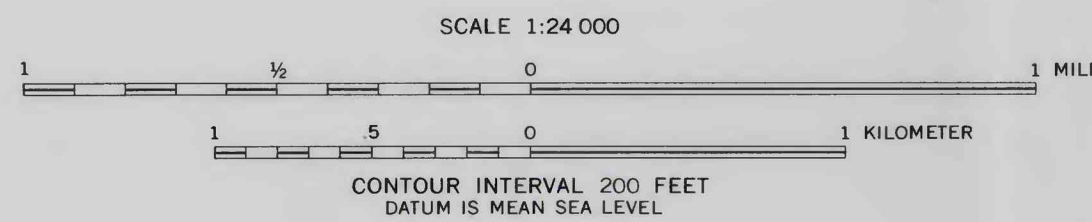


Base prepared by S. H. Patterson from advanced sheet of Haena 7½-minute quadrangle



EXPLANATION

Except for alluvium, which is not shown, the entire area is underlain by the Waimea Canyon Volcanic Series



Sloping upland surface (planeze)
Dashes outline plastic clay deposit

4 •

Auger hole for which section and chemical analyses are given in the accompanying table or in the text

Hole No. 5 | 20
5 | 15
Thickness of peat, in feet Thickness of plastic clay, in feet

Auger hole for which no section or analyses are given

Auger-hole logs and major chemical constituents, in percent, of samples from Alakai Swamp, Kauai, Hawaii
[Samples analyzed by X-ray fluorescence methods by R. M. Bromery]

Auger hole	Sample depth interval (feet)	Description of materials sampled	SiO ₂	Al ₂ O ₃	FeO ₂	TiO ₂
2	0.0-0.1	Soil, dark-brown (7.5YR 3/2)				
	0.1-0.6	Clay, gray (7.5Y N5), plastic	40.3	19.3	4.5	19.6
	0.6-4.5	Clay and saprolite, dark-brown (7.5YR 3/2) and dark-grayish-brown (10YR 4/2) mixed, chunky; ferruginous nodules abundant.	10.4	21.8	32.4	7.6
4	4.5-10	Saprolite, browner than very dark gray (10YR 3/1); nodules common; plastic.	11.8	21.3	34.2	3.1
	10-15	Saprolite, dark-gray (2.5Y N4) and dark-brown (7.5YR 3/2) mixed; contains a few brownish-yellow (10YR 6/6) veins.	20.7	28.4	29.4	6.3
	15-20	do.	20.2	33.0	24.6	5.3
	0-5	Peat, dark-brown (7.5YR 3/2)				
8	5-5.5	Clay, very dark brown, plastic				
	5.5-10	Clay, light-gray (10YR 6/1) in upper part and gray (2.5Y N6) in lower part; small white gibbsite nodules scarce; plastic.	27.7	27.2	4.3	13.9
	10-14	Clay, light-gray (2.5Y 7/2) and gray (2.5Y N6) mixed, plastic.	33.0	34.7	3.0	6.0
	14-20	Saprolite, upper part reddish-brown (2.5YR 4/4) and dark (7.5YR 3/2) mixed; lower part dark brown (7.5YR 3/2) and dark grayish brown (10YR 4/2) mixed; partly granular; plastic.	31.2	33.7	8.5	5.1
	0-4	Peat				
12	4-9	Clay, gray (10YR 5/1), plastic	29.5	33.7	3.1	7.4
	9-15	Clay, gray (10YR 5/1), plastic; contains some dark brown (7.5YR 3/2) and red (2.5YR 4/8) mixed in lower part.	30.3	32.5	11.1	5.8
	15-20	Saprolite, dark-brown (7.5YR 3/2), plastic.	29.2	31.5	17.1	4.9
	0-0.7	Peat, dark-brown (7.5YR 3/2)				
	0.7-1	Clay, dark-gray (10YR 4/1) plastic.	17.4	37.8	.8	10.1
13	1-6	Clay, light-gray (2.5Y N7); gibbsite nodules common; plastic.	7.7	46.0	1.8	13.2
	6-10	Clay, light-olive-brown (2.5Y 5/4); large nodules abundant; plastic.	6.5	42.5	10.1	9.6
	10-12	Clay, light-brownish-gray (10YR 6/2); ferruginous nodules abundant; plastic.	10.2	30.7	17.4	15.3
	12-13	Clay (?), red (10R 4/6) Hard rock	6.7	23.2	37.0	9.0
14	0-0.3	Clay, dark-gray (5YR 4/1)				
	0.3-5	Soil, mostly strong brown (7.5YR 5/6); ferruginous and gibbsite nodules common; plastic.	3.7	26.7	34.6	8.4
	5-10	Saprolite, dark-brown (7.5YR 5/2); nodules common in upper part; dark mineral veinlets in lower part.	13.5	41.0	22.6	4.4
	10-15	Saprolite, brown (7.5YR 4/2); contains dark mineral veinlets; plastic.	20.7	28.5	29.0	6.0
	15-20	do.	(not analyzed)			
14	0-0.3	Clay, dark-gray (5YR 4/1)				
	0.3-3	Soil, mostly strong brown (7.5YR 5/6); nodules scarce; plastic.	8.2	19.2	40.0	8.8
	3-5	Saprolite, dark-gray (7.5 N4), hard.	20.0	32.5	26.1	5.4
	5-10	Saprolite, dark-gray (7.5 N4); traces of dark mineral veinlets.	23.7	33.0	24.6	5.4
10-15	Saprolite, dark-grayish-brown (10YR 4/2), hard; dark mineral veinlets common.	19.2	30.0	28.1	6.2	

MAP AND SECTION SHOWING THE LOCATION OF CLAY DEPOSITS IN THE NORTHWESTERN PART OF ALAKAI SWAMP, KAUAI, HAWAII