



EXPLANATION

All upland areas are underlain by the
Kula Volcanic Series

Sloping upland surface (planoes)
Locally underlain by ferruginous basaltic deposits

Eroded cone of partly consolidated and
weathered cinder, spatter, and pumice.
From Stearns and MacDonald (1942, pl. 1)

Contact

Auger hole for which chemical analyses of
samples are given in the accompanying
table

Hole No. Depth augered,
 34 10 in feet

Thickness of low-silica Depth to hard rock,
 5 10 ferruginous basaltic,
 in feet, if penetrated
 in feet

Auger hole for which mineral composition
of samples was estimated by differential
thermal analysis methods (Patterson,
1962, app. p. 41-250)

Outcrop referred to in text

Outcrop sampled for metallurgical tests by
the U.S. Bureau of Mines (Calhoun, 1968;
Calhoun and Hill 1961, 1962, 1967)

Major chemical constituents, in percent, of auger-hole samples, East Maui, Hawaii

Samples with a laboratory number were analyzed by rapid methods described by Stearns and MacDonald (1942). Analytes T, L, D, Emmer, R, D, Bista, and Gullone Chlor. Samples without a laboratory number were analyzed by X-ray fluorescence methods by R. M. Ramsey

Auger hole	Sample depth interval (feet)	SiO ₂	Al ₂ O ₃	FaO	TiO ₂	Loss on ignition	Laboratory No.
23	2-4	13.0	35.5	21.0	.....	3.7	.....
	4-6	12.7	36.5	20.2	.....	3.6	.....
	6-11	17.4	31.8	20.3	.....	4.2	.....
26	2-4	12.8	28.7	20.6	5.4	5.6	23.9 156948
	4-9	23.3	27.7	21.6	1.7	5.3	17.8 156949
	9-10.5	20.7	26.2	22.3	2.2	5.6	18.9 156950
	10-14	11.5	27.9	20.1	5.4	5.9	17.0 156951
	14-20	19.8	25.1	17.0	8.1	5.8	18.4 156952
28	0-4	15.5	37.5	20.4	.....	4.6	.....
	4-9	22.5	24.5	23.1	.....	5.3	.....
	9-14	23.7	32.0	20.8	.....	4.7	.....
30	0-4	8.5	24.0	42.5	.....	7.3	.....
	4-10	10.0	33.5	21.4	.....	5.1	.....
	10-14	14.5	34.5	28.6	.....	5.2	.....
31	0-4	7.7	32.4	28.3	3.1	5.6	21.9 156953
	4-9	11.6	32.0	23.3	5.4	5.5	20.2 156954
	9-16	17.3	30.3	23.9	3.1	5.0	19.3 156955
	16-20	17.3	27.3	28.6	3.3	5.9	17.1 156956
	20-24	22.0	28.1	28.3	6.0	6.2	17.5 156957
32	0-4	4.2	27.2	37.0	.....	6.4	.....
	4-12	10.4	34.5	29.2	.....	5.0	.....
	12	.....	.....	.....	.....	.....	.....
33	0-4	11.5	34.5	26.5	.....	6.0	.....
	4-9	7.9	18.3	33.0	.....	6.1	.....
	9-14	10.7	35.3	27.2	.....	6.0	.....
35	0-4	13.0	34.7	26.6	.....	5.1	.....
	4-9	.....	.....	.....	.....	.....	.....
	9-30	.....	.....	.....	.....	.....	.....
36	0-4	3.0	24.8	38.2	.....	8.5	.....
	4-9	10.7	33.0	23.4	.....	7.9	.....
	9-14	9.2	37.8	27.0	.....	7.0	.....
37	0-4	13.3	34.6	26.6	.....	7.0	.....
	4-9	14.0	35.3	25.0	.....	6.7	.....
	9-14	11.0	33.6	26.0	2.3	6.6	19.8 156960
	14-19	10.1	33.6	21.6	5.0	7.8	19.5 156963
	19-24	18.1	32.1	17.5	7.1	7.4	17.2 156964
38	0-4	16.2	31.9	17.8	6.0	7.0	17.9 156965
	4-9	18.5	30.1	18.8	5.1	7.0	18.6 156966
	9-14	26.4	29.1	21.8	1.7	5.4	14.2 156967
	14-19	33.3	27.3	21.4	3.5	6.8	14.5 156968
	19-24	25.9	26.7	21.2	3.3	6.6	14.2 156969
39	0-4	8.5	30.0	32.2	.....	6.5	.....
	4-9	6.0	34.1	26.1	1.8	6.6	21.8 156971
	9-14	7.0	37.4	29.6	.....	7.7	.....
	12-17	7.0	38.0	25.2	.....	4.7	.....
	17-22	8.0	31.0	28.8	.....	5.8	.....
40	0-4	14.3	33.0	28.8	.....	.....	.....
	4-9	12.5	20.0	31.4	.....	2.2	.....
	9-14	19.0	37.0	22.4	.....	5.0	.....
42	0-4	17.0	36.0	23.2	.....	5.5	.....
	4-9	2.7	39.0	30.0	.....	7.8	.....
	9-36	3.2	36.0	29.2	.....	7.2	.....
43	0-4	17.0	32.5	27.2	.....	6.9	.....
	4-9	15.0	34.0	25.6	.....	6.7	.....
	9-14	11.5	20.0	36.8	.....	7.9	.....
	14-21	1.5	35.0	33.6	.....	8.1	.....
	21	.....	.....	.....	.....	.....	.....
44	0-4	12.7	21.5	32.0	.....	9.6	.....
	4-9	10.2	34.5	28.4	.....	6.4	.....
	9-14	12.7	34.0	28.2	.....	6.4	.....
23	14-20	.....	.....	.....	.....	.....	.....
	23	.....	.....	.....	.....	.....	.....

Base prepared by S. H. Patterson, modified from Pais, 1954, Haiku, 1957, and Keane, 1957, 7½-minute quadrangles

SCALE 1:24 000

1 MILE

1 KILOMETER

CONTOUR INTERVAL 200 FEET
DATUM IS MEAN SEA LEVEL

