

## DESCRIPTIVE REPORT.

To accompany sheet "K", Kahuku Lava flow of 1887 to sta. Kipaepae,
Island of Hawaii.

Eoline R. Hand. Asst. Chief of Party.

The country embraced within these limits comprises the most southerly portio of the island. There is a great cliff which starts at South Point and trends North, becoming more and more high as it leaves the point: it divides the land in two parts greatly diversified in character: on the West side it is low, of very gentle and even slope and composed of lava flows comparatively recent, and though the greater part is barren, here and there are spots of sparse vegetation. The shoreline is irregular and low, the cliffs not rising much over 10 ft. At and nearPuu Hou(hill) there are long stretches of sand.

Put Hou was formerly a trig.stationbut erosion has carried away the mark, but tests show that the point of the hill may, for hydrographic purposes, be used as the briginal mark: it was originally 273 ft. but is now 260.

From shore I could not see a sign of the Kailikii Shoal as shown on chart 4115.

There is a small fishing lillage ,Waiahuakini, at the sea near the base of the great cliffs, and a landing as shown: nearby, in the line of trees is a trail leading to the top of the pali: there is said to be no other for several miles North. There is no such place as Kaulu at top of the cliffs, and there is no local authority for the name Mamalu as applied to Molilele Pali.

A dangerous shoal makes off South Point at the Light: it appears to be about 200 m.wide and more. Through the courtesy of the captain of the Mauna Loa I took two vertical angles on the Light en route to Honolulu. Phis put us 0:4 mi.off the light, when bearing NISW (mag) and NGE (mag) deviation neglegible. In these positions there was more discolored water to the South, and I estimated the depth at between 4 and 5 fms. when bearings were

taken: in wough weather it is said to break even outside of these positions. This vessel, and others, do not usually rou dithe point so close in.

An interesting narrative was given me concerning this sheal: it was said that in olden times parties of natives would proceed in large cances to South Point when starting for TAHITI and would keep the course by fuls lowing the line of discolored water, which, it was claimed, extended that far.

East of the cliffs and ext ending as far as Kaalualu is a beautiful grassy plain: the soil is bright yellow and about three feet deep, and along the coast it has been washed back, exposing the bare, black lava: here and there on the plains are frequent outcroppings of ancient lava flows. A wagon can cross this plain from Waiohinu directly to the Light at South Point.

N.E. of Kaalualu is another area of low, even sloping lava, with scant vegetation, but not so barren as the area West of the great Pali. At the extreme N.E. corner of sheet is another geologic faultlike Molilele Pali, but not so large and steep: North of this the land is high, more steep, and covered with sparse weeds and grass, while at the sea are high cliffs which extend as far as Honuapo Landing.

There is but little at Kaalualu: a large ranch house, the home of the foreman of the Walahinu Agricultural and Grazing Co.A private road, practicable for autos runs up to the main road, joining it about a mile fast of centre of Walohinu. The bay appears rather shoal, and steamers no longer stop there for cattle: the inner lagoon can accommodate small boats, though the entrance is dry at low water.

On chart 4115 is shown a hill at starKipaepae: there is no hill:station is marked with a terraced cairn about 12 ft.high, painted white.

## --2-- rescriptive Report, sheet" & ", Hawaii, Soline R. Hand.

The S.E. coast is the weather side because of the N.E. trade, which is blowing more or less, steadily the greater part of the year: in consequence sonsiderable swell is encountered, and the surf makes langing a matter of much difficulty, if possible at all. South Point, however, offers a lee, and smooth water. I do not know the nature of the anchorage below the cliffs, but it is certainly not shoal.

Between December and March there is liable to be heavy weather from the S.and S.W.Though the wind does not often reach the coast, enormous swells roll in to the discomfiture of the hundreds of lishermen and the disarrangement of steamer schedules, all along the West coast; but for by far the greater part of the time the ocean is smooth and landings can be made

with ease from South Point to Mahukona.

Asst., U.S.C.& G.S

ISLAND of HAWAII.
Sheet"K", Kahuku Lava Flow
of 1887 to Starkipaepae.
Surveyed March, 1914
Top'y and inking by Eoline R. Hand
Eoline R. Hand, Asst. Chief, of Party.
Contour interval, 50ft:
Scale, 1:20000

LIST of POSITIONS.

to accompany Sheet "K," Kahuku Lava Flow to A "Kipaepae". ISLAND of HAWAI!

Foling R Hand Asst. Chief of "

* suggestions	ford	Ashon	<u>e</u>			Eoline R. Hand, Asst, Chief of Party.
Name		II. M.		71. P.	hei.	Description and symbols
End	18:59		155-46		25	Paint, see List Sheet J."
Aspa D	55		46			Lary rock offshore at Kahuku Lava Flow of 1887.
Fo	18"58		155"46		40-45	Paint, small spots, at outermost point
Z 4.	58		45'	-	30-70	" large caren of jagged lava.
Vat	58		45'		40-50	" " O" on large rock.
Coin	50		155 44		T	Prominent Lavamound.
Hand	58		44		15-20	Paint on cairn.
Lid	58		44'	· · · ·	135	Higher + more Wly of two yellow hills, 200 m. apart.
Net	58		155 44		45	Paint on rock.
Bat	55		155*43		170	W. Knob double yellow hill
H 44 9	58		43			Paint onpoint N.W. and beach at cliff edge.
1447	18957		43		40	" Near W. end beach a th Puy Hou.
30	67		155042		1	" on cair, som inshore,
3.		1328	9° 2.'	1646		" " rock at 1st point SE offug How Orient on Umis Ahu.
Wo	57'	377	42			" " Cairn N. W. end boulder beach.
				<del>-</del>	1,0	
Mound	57' 57		1/2	ļ	45	Mound, grass on M. Side, Bl. Iqua around.
4114			42		22	Cairn.
C010	57'		42		21-25	
rig .	1886		155 41		60	" " rock up slope, where cliff leaves the sea.
Pole	56		4/		280	A 243 scantling set lam from edge cliff.
Pine	56		4/		160	theplotted positions shifted down to HW.M.
Stick	1885		3/		103	
Led	55		4/		60	Paint. IIII on choc. drop shoped rock edge cliff.
Nag	55		41	<u> </u>	45	u u u u
51,0	55	ļ	41		35	Centre one of 3 perp timbers supporting horizontal boat hoists.
4122	18.54		155 90	ļ	ļ	Small hill at South Point 450M E. of Light
Bust	54		40'		15-20	Paint on 6074 sides wall of Stone house.
014	1835	<u> </u>	70	<u> </u>	25	Stone house on grassy plain.
H 417	55		40	ļ	20	Paint on stone shelter
Hag	55	<b>-</b>	40'		140	Small house, rusty tin roof; small tree at end, up in old lava flow.
8120	55		15539		55	Paint on cairn with stick; sea end old lava flow.
Mate	55	<u></u>	39	İ	48	· · · top low hill
Zone	55	<u> </u>	39'		20-25	" Lava mound 40m inside, + 30m S. W. from stone house.
Big	1896		155"38"		115	Hill at deep bax
120	56		38		65	Paint on Stone house.
10	56		38		15	. cain back 20m from edge yellow soil.
Horn	56		38'		45	" highest of 3 stone wind shields about 15 m. apart.
lot	1857	<u></u>	155937			" - rock N.E. side point
T46	57		37		35	· · cairm
15,0	57'		37	<u> </u>	1015	Loose stump on grass.
8+46	57	1800	37	868	65	" con stone house Orient Lae ottamilo
Sun	1858	1	37	Ĺ	25	· on lava hump inside double point
Mon	58		37"			" See end stone wall.
ved	58		37			White washed house nearest boy: 2 windows S. side
Ed.	58		37	-	50	Ranch house Waiohinu Agricultural & Grazing Co. at Naalualu Bay.
Fry	58	1	155736		T .	Bone pile, innerbay, Kaulyalu
Nall	58	†	36			Paintonwall "
Chin	58	<del>-</del> -	36			Most Sky of two shacks, " has Tin root.
Yap	58		36	<del> </del> -	15	Paint on cairn on mound of sand.
	58	<del></del> -	15536	t	T	Double shark midst vine covered sand wall ground.
Leg Gold	18'59'	<del> </del>	35"	<del>                                     </del>		Paint on prom rock 100 m. inside
12 A / C.	7-07	i	1 55		L	<u> </u>
One	59		35	ì	1	" cairn at deep bight.