3291 A

Blueprint

CONFIDENTIAL

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

O. H. Tittmann

Superintendent.

State: Hawaii

DESCRIPTIVE REPORT.

3291 A

Hyd. *Sheet No.* 3291a

LOCALITY:

Oahu Islands

191

CHIEF OF PARTY:

J. B. Miller

11—1645

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

[redacted]

REG. NO. 3291 a

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. .....

REGISTER NO. 3291 a

State Hawaiian Is.

General locality Oahu

Locality Kaiaka and Waialua Bays

Scale 1 - 5,000 Date of survey March 2, 1914, ~~192~~

Vessel Patterson

Chief of Party J.B. Miller

Surveyed by G.C. Mattison + P. Herberger

Protracted by Field Party

Soundings penciled by Field Party

Soundings in fathoms ~~feet~~

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by .....

Inked by Field Party

Verified by R.L. Johnston

Instructions dated ....., 192

Remarks: Blue print only. (Original tracing delivered to Rear-Admiral C.B.T. Moore, Commandant, Honolulu Naval Station)

GPO

Form 167 11—683

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Washington, JUL 19 1927, 192

Referred to: F R

For: The sheet to this D.R. is marked "Confidential" in our register.
Wain

Released from confi.
see letter #151-1923
cab
E.P.

Returned to confidential
file Nov. 19, 1931. G.H.S.

GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE

The original copy has been delivered to Rear-Admiral C. B. T. Moore, Commandant, Honolulu Naval Station. It is requested by him that it be kept confidential.

COAST & GEODETIC SURVEY
MAR 2 1914
STEAMER PATTERSON

No. 203
Ed. 6-10-13—500,000

DEPARTMENT OF COMMERCE
Coast and Geodetic Survey

O. H. Tittmann, Supt.

A DESCRIPTIVE REPORT ON THE HYDROGRAPHIC SHEET OF KAIAKA BAY, WAIALUA DISTRICT, OAHU ISLAND, HAWAIIAN ISLANDS.

SCALE 1:5000

Surveyed in March 1914 by the C. & G. S. Steamer PATTERSON,

James B. Miller, Assistant, C. & G. Survey, Chief of Party

Geo. C. Mattison, Aid, C. & G. S.
Paul Herberger, Mate, C. & G. S. In charge of hydrographic parties.

This sheet is supplementary to sheet 3291 of 1910: and likewise pertains to the confidential surveys of Oahu Island. It is also to be kept confidential. It shows a development of Kaiaka Bay, which adjoins Waialua Bay and lies westward of it. Sounding lines were run with cutter and whaleboat 1/16 mile apart. The features developed may best be understood by referring to the sheet.

Signals were taken from sheet 3291, verified by sextant angles: and new ones were located by sextant angles recorded in the sounding books. Tide reducers may be obtained from the tide tables; there is a range of only 1/2 foot on the day when the work was done, and most of the sounding requires no reducers.

Respectfully submitted

James B. Miller

Chief of Party, C. & G. Survey.

Honolulu, T.H.,
March 8, 1914.

E.R.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON March 22, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 3291[a]

Kaiaka Bay, Oahu Island, Hawaiian Islands

Surveyed in 1914.

Chief of Party, J. B. Miller.

Surveyed by Field Party.

Protracted and soundings plotted and inked by Field Party.

Verified by R. L. Johnston.

1. The blue print filed as 3291[a] represents the smooth sheet for this survey, the original tracing having been delivered to the Commandant of the Honolulu Naval Station.

   The blue print contains besides the 1914 work, portions of the work done in 1910 and 1911 and the distinction between the various surveys is appropriately indicated on the print.

2. The records conform to the requirements of the General Instructions.

3. The plan and character of development fulfill the requirements of the General Instructions.

4. The sounding line crossings are satisfactory.

5. The information is sufficient for drawing in the usual depth curves.

6. The sheet was entirely prepared in the field. It departs from the General Instructions in the following respects:

   a. The soundings are plotted in fathoms and quarters instead of fathoms and sixths.

   b. In converting from feet to quarters no consistent rule was followed, 1 foot being sometimes considered as a quarter and sometimes dropped. Similar inconsistent treatments were made with 4 and 5 feet.

   No changes were made in the office in this respect as it was not considered justifiable.

GPO

7. The junctions with the adjacent surveys are good.

8. The area intended to be covered by this survey is sufficiently developed and no further surveying is necessary.

9. The character and scope of the surveying is excellent. The field drafting is good.

10. The office draftsman gave the customary check to the soundings. The positions of the lines were accepted as shown.

11. Reviewed by A. L. Shalowitz, March, 1926.

SHEET NO. 50 KAIAKA AND WAIALUA BAYS, OAHU ISLAND, T. H.

Date 1914	Boat	Let.	Vol.	Hours	Pos.	Sdgs	Miles (stat.)	Remarks
Mar. 2	Whaleboat	a	1	7.0	125	1642	7 3/4	Waialua Bay
" 2	Cutter	a	2	7.0	89	374	4 3/4	Kiaka Bay
	TOTALS.....		2	14.0	214	2016	12 1/2	

Area Sq. Stat. Miles .9

Copy to

To accompany report of Hyd. 3291a

SUPPLEMENTARY NOTES ON A RECONNAISSANCE OF OAHU ISLAND. TO ACCOMPANY ORIGINAL NOTES MADE DECEMBER 19, 1913.

Westward of Kaiaka Bay, along the sandy beach between it and the beginning of the rocky shoreline near Kaena Point, the coral reef extends 500 to 600 yards offshore, and there are breakers on it at all times. A boat cannot pass along the beach inside the reef, as there is less than 1 foot of water and many bare ledges. There are five small openings in the reef through which a small boat drawing about 2 feet of water may pass to within 75 yards of the beach; and a boat drawing 1 foot to the beach itself. Within 75 yards of the beach there are flat coral ledges without interruption. All these openings are equally bad in bad weather, as the backwash from the breakers on each side entirely fills them. In good weather, with a swell breaking in about 2 fathoms all are equally good: but landing at any of them is entirely a question of skilful handling of good surf

boats.

These openings described in order from the eastward are as follows. The first one is about 1/2 mile westward of Kaiaka Bay; the reef on each side is about 500 yards wide, and the opening is about 300 yards wide: it is V- shaped, with a narrow point at the beach, and does not admit a boat behind the reef. In moderate weather there are breakers entirely across the opening.

The second one is about 1 1/8 miles westward of Kaiaka Bay, and is also V- shaped. It does not admit behind the reef, but ends in flat ledges 50 yards from the beach.

The third opening is at the village of Mokuleia; there is a rock 1/2 mile offshore at this place, and one may pass about 75 yards westward of the rock, and thence south-southeastward through a passage about 300 yards wide to within 75 yards of the beach. There are bare ledges and heavy breakers on both sides, but there are no breakers in the passage except in very bad northwest weather. This passage does not admit behind the reef, and has flat coral

ledges at its inner end.

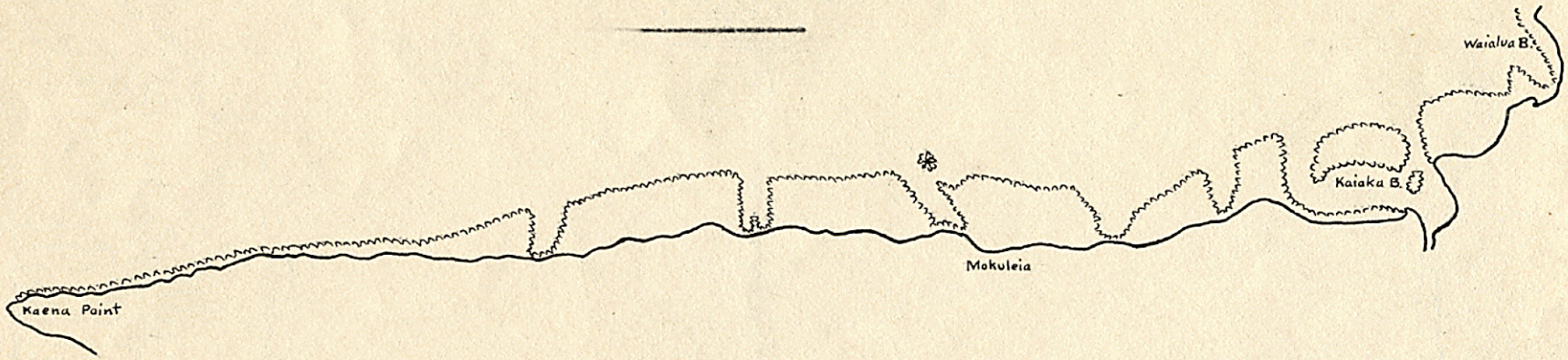
The fourth opening is about 1 mile westward of this outlying rock and is about 500 yards wide; it has a tongue of reef extending from shore in the middle of it, dividing it into two parts; and has bad breakers except in very moderate weather. There are flat bare ledges 75 yards offshore at the inner end of it, and it does not admit behind the reef.

The fifth and last opening is about 5 miles westward of Kaiaka Bay and about 1/2 mile before one reaches the first rocky shore near Kaena Point. It is about 500 yards wide, and the swell breaks directly on the beach, and on a few ledges near it. Smooth weather is required for landing here. It does not admit behind the reef. From here to Kaena Point the reef is narrower and more open, the breakers run close to the shore in many places: landing is possible only in smooth weather.

Waialua, Oahu, T.H.,

March 2, 1914.

S K E T C H



3 2 1 0

miles(naut.)

VEC
May 20,1914

HYDROGRAPHIC SHEET 3291a.

Waialua and Kaiaka Bays, Oahu Island, Territory of Hawaii, by Asst. James B. Miller in 1914.

TIDES.

Predicted tides were used for reduction of soundings.

Mean lower low water, or
plane of reference below mean tide level = 1.0 ft.

Mean rise and fall of tide = 1.5 "

Hyd Sheet No 3291a

This work, an examination of Kaiaka Bay, was plotted in 1914, on a scale of one to five thousand, on vellum. The original sheet was delivered to Rear Admiral C. B. T. Moore, Commandant, Honolulu Naval Station and a blueprint of this was sent to the office. This blueprint serves as a smooth sheet.

The soundings are plotted in fathoms and quarters. In converting from feet to quarters of a fathom, the field party did not follow any uniform rule. For example, one foot is sometimes shown as one quarter of a fathom and sometimes dropped, four feet sometimes as one half a fathom and alloo as three fourths of a fathom and five feet is sometimes shown as three fourths of a fathom and allso as one fathom. It was not considered adviseable to attempt to revise the sheet for such slight errors.

This work has been joined up on its outside limits with the old work on Hyd 3290 and Hyd 3291, but within the limits of this work no attempt at a combination has been made.

R. L. Johnston
Feb, 1926.