

4701  
4701

4701

Form 504	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
..... Director	
State: Hawaiian Is. ....	
<b>DESCRIPTIVE REPORT</b>	
<del>Topographic</del> Hydrographic	} Sheet No. <sup>14</sup> 4701
LOCALITY	
Kauai - W. Coast	
Kekaha to Makaha Pt.	
1927	
CHIEF OF PARTY	
F. G. Engle	

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY

L & A

JAN 8 1928

State: Hawaiian Islands Acc. No.

11-5613

## DESCRIPTIVE REPORT.

4701

Hydro. Sheet No. 14

### LOCALITY:

Kauai Island

~~Kekaha Point~~ to ~~Makaha~~ Point

West coast of Kauai.

1927

### CHIEF OF PARTY:

F. G. Engle

DESCRIPTIVE REPORT  
to accompany  
HYDROGRAPHIC SHEET NO. 14  
KEKAHA TO MAKAHA POINT KAUAI, T.H.  
\*\*\*\*\*

LIMITS: This sheet covers the inshore hydrography between Kekaha and Makaha Point and joins the hydrography of field sheet No. 12 on the north, and joins on the south with the work completed in 1926, south coast of Kauai. The sounding lines were carried offshore to approximately the 10 fathom curve.

SURVEY METHODS AND CONTROL: Control for this survey consisted of triangulation stations established by the field party and a series of topographic signals located on topo sheet J, 1:20,000.

This survey was made in accordance with the usual methods of launch hydrography using a 30 ft. motorsailer and a copper centered hand lead line with a 10 lb. lead. The sounding lines were carried as close to the beach as safety would permit. The outer limit of breakers was sketched in from the sounding launch while at the inner ends of the sounding lines.

There is a slight discrepancy in the signals of the boat sheet and the smooth sheet on the northern half of the sheet due to an erroneous recovery of signal NOHILI making all signals in the vicinity incorrect on the boat sheet. The triangulation was re-computed and all signals are correct on the smooth sheet.

Tidal reducers for this sheet were obtained from a portable automatic gauge at Hanamaulu Bay and from a plain staff gauge at Wiamea Bay.

GENERAL DESCRIPTION OF THE COAST: This subject is covered by the descriptive report accompanying topographic sheet J.

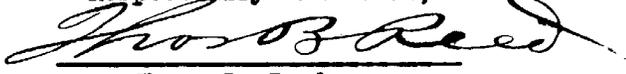
LANDMARKS: The most prominent object on the southern part of this sheet is Kekaha Mill Chimney. All other prominent objects on this sheet are included in the descriptive report of topo sheet J.

INSHORE DANGERS: Between signals OOMANO and KEIKEI a submerged coral reef extends a considerable distance offshore, the outer limits of breakers being sketched on the boat sheet from the hydrographic launch. Off signal CORAL the outer limit of breakers was also sketched from the launch. Rocks awash close to the shore were sketched by the hydrographic party off signals HILL, STIK and LON. All other coral reefs close to shore were located on the topo sheet.

Approved and forwarded,

  
F. G. Engle, Comdg. Discoverer

Respectfully submitted,

  
Thos. B. Reed

STATISTICS SHEET NO. 14

WEST COAST KAUAI, SCALE: 1:20,000 - - - - - KEKAHA PT. -- MAKAHA PT.

<u>Date, 1927</u>		<u>Letter</u>	<u>Volume</u>	<u>Positions</u>	<u>Soundings</u>	<u>Miles Stat</u>	<u>Vessels</u>
May	20	a	1	162	571	28.0	Stbd. Motorsailer
	21	b	1 & 2	196	665	32.2	"
	23	c	2	156	554	26.0	"
	24	d	2	51	177	8.7	"
	25	e	3	126	418	20.0	"
	26	f	3	109	347	15.5	"
June	6	g	3 & 4	151	571	21.3	"
	10	h	4	50	142	8.5	"
Totals ---				1001	3445	160.2	

Copy for Record Section files.

February 14, 1928.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in  
volumes of sounding records for

4

HYDROGRAPHIC SHEET

4701

Locality:

**KAUAI ISLAND, T.H.**

Chief of Party:

Plane of reference **P. G. Engle, 1927.**

ft. on tide staff **Mt L L W**

**2.3**

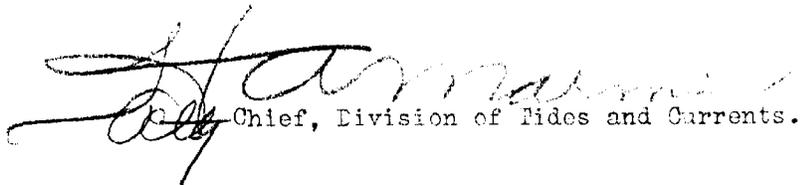
**Hanalei Bay**

**2.0**

ft. ~~do~~ **Waimea**

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

  
Chief, Division of Tides and Currents.

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4701

Kauai, West Coast

Surveyed in 1927

Instructions dated November 23, 1926.

Chief of Party, F. G. Engle.

Surveyed by T. B. Reed.

Protracted by T. B. R.

Soundings pencilled by T. B. R. and J. C. Partington.

Verified and inked by F. B. Kelly.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. Crossing lines generally show good agreement.
4. No depth curves were drawn in the field.
5. Between  $\Delta$ Oomano and  $\Delta$ Keikei, and off  $\odot$ Carae the outer limits of the breakers were sketched on the boat sheet from the hydrographic launch. No notes were made in the sounding records so boat sheet determinations had to be accepted.
6. The junction on the north with H. 4709 was good; on the west with H. 4630, good, with few exceptions. H. 4719 on the west has not yet been inked.
7. One hundred six fixes were checked and three found slightly in error.
8. Field protracting - excellent. In quite a number of cases no attention was paid, by the field plotter, to change of time interval between fixes and soundings had to be replotted in the office.
9. Report by F. B. Kelly, April, 1928.

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DEM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 11, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4701

West Coast of Kauai, Kekaha to Makaha Pt.

Instructions dated November 23, 1926

Surveyed by T. B. Reed.

Chief of Party, F. G. Engle.

Protracted by T. B. Reed.

Soundings plotted by T. B. R. and J. C. Partington.

Inked and verified by F. B. Kelly.

1. Specific instructions were complied with.
2. Development was adequate although a few short lines west of  $\Delta$  Kalolo would have been desirable.
3. The records were good. No mention in the records was made of the plain tide staff at Wiamea Bay.
4. The junction with H. 4630 on the west was not very good as greater depths were found on that sheet. This was probably due to poorer control on H. 4630 as distant signals and hydrographic signals were used. Between positions 12 E and 14 E on H. 4630 where the junction was not very good it was found that the position interval on that sheet was 15 minutes on account of position 13 E being rejected.
5. A few changes were made in depth curves as inked.
6. Crossings were adequate.
7. Surveying was excellent. Field drafting and inking were excellent.
8. Reviewed by W. M. Gibson, May 3, 1928.

Approved:

---

Chief, Section of Field Records (Charts)

---

Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.  
4701

HYDROGRAPHIC TITLE SHEET

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. 14

REGISTER NO. 4701

State Hawaiian Islands

General locality Kauai Island - W. Coast

Locality Kekaha Point to Makaha Point, west coast of Kauai.

Scale 1:20,000 Date of survey May and June, 192 7

Vessel DISCOVERER

Chief of Party F. G. Engle

Surveyed by Thos. B. Reed

Protracted by Thos. B. Reed

Soundings penciled by Thos. B. Reed and J. C. Partington

Soundings in fathoms ~~XXXX~~

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated November 23, 192 6

Remarks:

Applied to chart 4100 Class R. Wetmore 11/7/58