

4059

Diag. Cht. Nos. 4100 & 4116

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

4059

~~CONFIDENTIAL~~

Acc. No. 25-100
JUL 25 1924
U. S. & G. SURVEY

Confidential

4059

~~CONFIDENTIAL~~

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Hawaii

11-5813

DESCRIPTIVE REPORT.

Topog. Sheet No. 4059

LOCALITY:

Island of Maui

Hana

1924

CHIEF OF PARTY:

E. R. Hand

DESCRIPTIVE REPORT

To accompany topographic sheet of Hana Cove, Maui, T.H. Surveyed June, 1924

Eoline R. Hand, Chief of Party.

The survey was controlled rigidly by the four triangulation stations:
KA PUKAULUA, PUU O KA HAULA, NANUALELE (misspelled on the data furnished me) and

place. These positions were plotted on the projection in accordance with the data furnished me; but I notice they do not fit the values that I scaled off the bromide of topog sheet 3274. Presumably different datum. I do not know which is finally to be accepted but there ought to be consistency; for instance, the position of Hana Light, as given in the Light List, does not fit my value furnished in my List of Positions. Their height is 85 for focal plane of light; I do not know how closely they obtain those heights, therefore cannot say if 84 or 85 is the better. I know my value was carefully obtained, but the matter seems of little practical importance - a foot's difference. We ought to get together, though, on the position.

I can add but little information beyond what I show; the cannery is new; capacity when running full (not yet going) will be a million cases a year, 24 cans to case. They are held up by lack of water now. The wharf is new; a fine structure of concrete; the moor, buoys belong to plantation, Kaeleku Sugar Co. There is an oil tank (fuel) at pineapple place, capacity 15000 bbls. a pipeline from wharf.

It may be said the semi-cone shown behind wharf is not natural; it is not, I agree. The high cliff was actually Blasted down to make a big fill for the wharf. I have endeavored to show how it now appears.

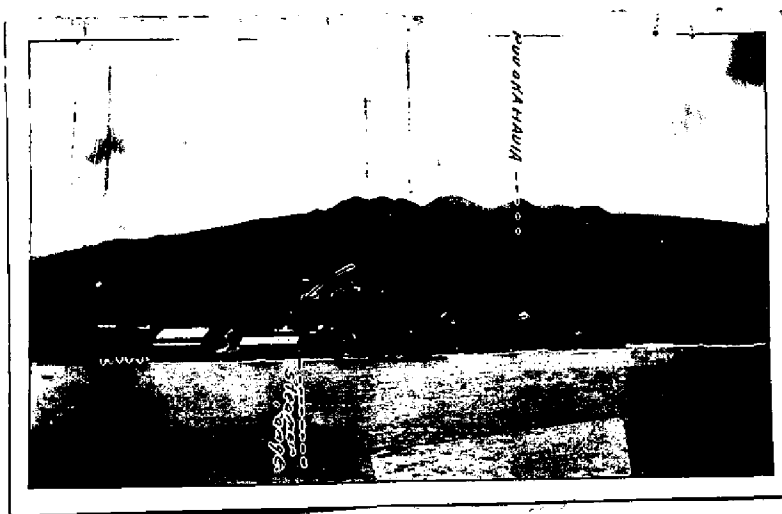
I have described the range; it is most useful. It would seem a good

LIST OF POSITIONS

to accompany topographic sheet of Hana Cove, Maui, T.H. Surveyed June 1924.

Eoline R. Hand, Chief of Party.

Name	Lat.	D.M.	Long.	D.P.	Description
L.H.	20°45'	285	155°58'	1665	sq. wh. structure center steep sided
		1560		71	islet off Kauiki Hd. with top level- ed off: hei. focal plane of lt. 84' but Listed as 85' also different pos- ition listed from above probably acct different datum. W.fl. ev. 2 sec.
Warf	45'	240	59'	166	outer, or N. cor. new wharf: at bitt
		1605		1570	or niggerhead.
Fr. range	45'	196	59'	470	N.gable most nly of two warehouses
		1648		1266	on the shore beyond wharf: white: ### it is the fertilizer shed.
Rear range	45'	47	59'	761	gable of Hana Store (P.O.) has red
		1798		975	roof: front shows brown: seen well above trees.
Pine	45'	1080	59'	591	short but large diametered iron
		765		1145	stack at pineapple cannery on north shore: bldg grey: g:i; sides and ## roofs.



DESCRIPTIVE REPORT

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It may be said the semi-cone shown behind wharf is not natural; it is not, I agree. The high cliff was actually Blasted down to make a big fill for the wharf. I have endeavored to show how it now appears.

I have described the range; it is most useful. It would seem a good thing to follow the British custom and make a sketch of this range. I submit a photograph of this range: the after range is not the light spot away up but is the gable in the shadow. it may be clearly made out under a glass.

This city is quite isolated: the road to the south runs about fifteen miles or so and then stops, there is no road connection around that way, though it is possible to come down the famous Haleakala crater and out Hana way, from Wailuku. To the north the road runs about twelve miles, but a highway is now being built all the way to Hailulu, the large town on the north side of Maui. Optimists believe this way will be open in 1925. At present, at the end of this

405
Photographed from original Topo. Sheet No. 2
in the Archives of the U. S. Coast
Survey. Surveyed 1881

(SPACE FOR ARCHIVES STAMP)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

_____, *Superintendent*

HYDROGRAPHIC SHEET No. _____

SOUNDINGS

Locality: _____*Boat* _____*Vol. No.* _____ *Vols.* _____*From* _____, 19____, *angle* _____*To* _____, 19____, *angle* _____*Miles of sounding lines* _____*Number of soundings* _____*Number of angles* __________
19____*Name of Vessel:* _____*Chief of Party:* _____

SOUNDINGS

Main T. L.

Year 1924 Month June

Day of Month 18

POSITION NUMBER	TIME		SOUNDINGS		RED. FOR TIDE	REDUCED SOUNDINGS		BOTTOM
	MER.	M.	FEET	TENTHS		FEET	TENTHS	
	h. m. s.		Fathoms	Feet	Feet	Fathoms	Feet	
1	8	35	8	0		48	0	
2	8	45	8	0		48	0	
3	8	52	8	0		48	0	
4	9	49	8	0	0.0	48		
	9	50	7	1		43		
	9	51	6	5		41		
	9	52	7	5		47		
5	9	54	6	4		40		
	9	55	6	0		36		
	9	56	5	3		33		
	9	57	5	2		31		
6	9	58	5	0		30		
7	10	42	1	2		8		
	47	2	2			10		
	43	30	2	5		17		
	44	40	3	0		15		
8	44	36	2	1		19		
	45	00	3	2		20		
	45	30	3	3		21		
	46	00	3	4		22		
	46	30	3	5		23		
9	47	00	3	5		24		
10	48	00	4	00		25		
10	49	00	4	00		24		
	50	00	4	1		25		
11	51	00	4	2		26		
	52	00	4	4		28		
	53	00	4	2		26		
	54	00	5	2		32		

Hana-68
plantain
wholeboat

1

Boat used

11-740

day

BOAT'S HEAD
BY COMPASS

ANGLES AND RANGES

REMARKS
AND
COURSE

Pine 79'00" detached
Waf 87'00" pines -
Twin 87'00" mgs on
steamer
range

2 Bgen 6506
Sp.
Twin 5456

3 Map 9018
Waf
Twin 6530

4 Pine 6428 from
Moun range to summ in
above
range.

5 L. H. abean

6 E edge what in lang end line.

7 of the gos down from
entire
area below

SOUNDINGS

Year 19 24 Month JuneDay of Month 18

POSITION NUMBER.	TIME M. P. A.	SOUNDINGS				REDUCED SOUNDINGS				BOTTOM
		FEET		TENTHS		FEET		TENTHS		
		Fathoms	Feet	Feet	Tenths	Fathoms	Feet	Tenths	Feet	
		h. m. s.								
		<u>11.13</u>								
10		55.00	5	00	0.0	30	00	✓		
		56.00	2	00		12	00	✓		
12		57.00	2	00		12	00	✓		
		✓								
13		11.07	1	00	0.4	5	6	✓		
		11.08	2	00		11	6	✓		
		11.09	1	41		9	6	✓		
		11.10	2	00		11	6	✓		
		11.11	1	30		10	6	✓		
		11.12	2	00		11	6	✓		
		11.13	2	20		13	6	✓		
		11.14	2	10		12	6	✓		
14		11.15	3	00		17	6	✓		
15		11.16	5	00		29	6	✓		
		11.17	5	00		29	6	✓		
16		11.18	4	41		27	6	✓		
		11.19	4	30		26	6	✓		
17		11.20	4	40	0.4	27	6	✓		
		11.21	4	40		27	6	✓		
		11.22	4	40		27	6	✓		
18		11.23	4	40		27	6	✓		
		11.24								
19		11.24	4	20		25	6	✓		
20		11.25	4	10		24	6	✓		
21		11.25 45	3	10	✓	18	6	✓		
		<u>D.M.</u> <u>1.4</u>								
22		12.38.00	2	30	1.4	13	6	✓		
		38.10	2	30		19	6	✓		
		39.00	5	20		30	6	✓		
		40.00	5	40		32	6	✓		
23		40.30	5	20		30	6	✓		
		41	5	10		29	6	✓		
24		42.00	4	50		28	6	✓		
25		43.00	3	30		19	6	✓		
		44.00	5	00		28	6	✓		
26		45.00	3	40		10	6	✓		
		46.00	2	30	1.6	9	6	✓		
		47.00	2	00		10	6	✓		
27		48.00	2	00		10	6	✓		

Sublocality
Hana Bay
Boat used honey whaleboat; 9 day

2

BOAT'S HEAD
BY COMPASS

ANGLES AND RANGES

REMARKS
AND
COURSE

(Sounded "mii" horn
do. as wind head, out to sea
wind, N W of "mii")

12 in same range
steep and Kaula in
range end line
evening: S.

13 ~~Pen~~ 112 55
near (6) (center)
work. 46°00' of phase
running back now,
can't see (4) edge
notes land in range

14 Wedge near house and

15 ~~debar~~ in range
front for range and
out to sea

16 ~~near~~ near coils &
debar in range

17 ~~near~~ coils to S of
Kaula in range.

18 ~~left~~ of position
and debar in range
also and better, near
in range range.

SOUNDINGS

Year 19 *24* Month *June*Day of Month *18*

11-710

POSITION NUMBER.	TIME MER.----- -----M.	SOUNDINGS		RED. FOR TIME	REDUCED SOUNDINGS		BOTTOM
		FEET	TENTHS		FEET	TENTHS	
		Fathoms	Feet	Feet	Fathoms	Feet	
	<i>h. m. s.</i>						
	<i>P. M.</i>			<i>1.8</i>			
28	1256	3	3		19	2	<i>end heads</i>
	1257	3	0		16	2	
	1258	3	00		16	2	
29	1259	5	3		31	2	
	1300	<i>run</i>					
	1301	<i>run</i>					
	1302	5	2		30	2	
	1303	3	0		16	2	
	1304	3	00		16	2	
30	1305	2	2		12	2	
	1306	2	4		14	2	
	1307	4	2		24	2	
	1308	3	4		20	2	
	1309	4	3		25	2	<i>end heads</i>
	1310	5	1		29	2	
	1311	4	3		26	2	
31	131200	5	3		31	2	
	131300	4	5		27	2	
32	131400	4	3	<i>2.0</i>	25	0	
	131500	6	0		34	0	
	1316	3	4		20	0	
	131700	6	0		34	0	
	131800	6	1		35	0	
33	131900	6	3		37	0	
34	1400	6	3		37	0	
	140100	5	5		33	0	
35	140200	5	2		30	0	
36	144600	2	1		11	0	
	145000	6	2		36	0	
37	145600	7	2		42	0	
	145700	6	2		36	0	
38	148000	5	1		27	0	
39	149000	5	00		25	0	
	1500	5	2		30	0	
	151000	6	2		36	0	
40	152000	5	3		31	0	
	153000	5	0		28	0	
41	154000	3	4		20	0	

*James
Lynch*

*end
heads*

Boat used

19 days

11-740

BOAT'S HEAD BY COMPASS

ANGLES AND RANGES

REMARKS
AND
COURSE

28 ~~Down~~ 93 30 ✓
~~Wind~~ 27 28 ✓
 Rain

29) *Linum S. guayanaense* -
with *E. moribundum* -
my new sig.
where chain head just
as large - 1 - 1000

30 Noddy nigrum Latham
in range
mod N.E. wind ✓

31 - must be nests collected and
labeled in cages.

32 New colonies over 1
Rabbits in range

33. in same range

34 mid of warehouse (feet)
and globe star image

35 ✓ E morning breeze
line ends ✓

3.6 line starts just S of
W of the rock that
is off pennock, and

37 *Melospiza m. orange.* a
crossed the cage.

38 - half run belongs to the

39 The color book of colors: all in black

40 centimeters bones / Kabsala

41 Δ Nam 77 22 $\frac{1}{2}$ lmd
Pm 21 40 lmd
Jm

train near NE
(other also been such
junction, in camp?
Kohance)

SOUNDINGS

Year 19 24 Month

Day of Month / 18

[illegible]

Sublocality

4

Gaug Bone
near wholeboat

Boat used

9 day

11-740

BOAT'S HEAD
BY COMPASS

ANGLES AND RANGES

REMARKS
AND
COURSE

42 ^{nan} 5310 ^{from H.L.}
^{Range} ^{beats 29.}
^{from} 1416 ^{in range.}
line near S. towards buoy 2
& point ^{in range}
nubbin ^{in range} ^{ink post} ★

43 [✓] near mid ls and
Robards in range

44 [✓] half way between
mid ls and end of
Coles in range &
Robards

45 [✓] near end of
Robards

46 [✓] middle of oblique ls.

47 [✓] base of post beam
also near end of
Robards about by
cane marker ^{towards}
^{east.}

48 [✓] in ship's range, ^{down}

49 [✓] mid. of fort. mound house
(^{first range}) and ^{base}
gate in range. ^{total}

50 [✓] Point 69 57 [✓]
^{to} ^{way house} ^{on}

mid. ^{east} ^{of} ^{2nd} ^{off} ^{permeable}
^{material} ^{with} ^{beach}
^{gate} ^{O.K.}

SOUNDINGS

Year 19

Month

Day of Month

18

11-740											
POSITION NUMBER.	TIME		SOUNDINGS			RED. FOR TIDE		REDUCED SOUNDINGS		BOTTOM	
	MER.	M.	FATHOMS	FEET	TENTHS	FEET	TENTHS	FATHOMS	FEET		

Sublocality
Hana Cove
Boat used heavy whaleboat day

5

11-740

BOAT'S HEAD BY COMPASS	ANGLES AND RANGES	REMARKS AND COURSE
	Pm 50° 0'	✓
	Calab (N)	on ship's range
51	Pm 54 06	
52	Pm 51 14 ✓ Sole 58 56 Pm.	
53	Pm 68 35	
	Fund range "new signal" ?	
54	Warp 53 10 Pm outer rock (of 2)	
55	94 53 53 10	
	Pm 71 55 fund range new sig ?	
57	Pm 184 00 close to range Warp 127 28 outer rock, Pm in on ship's range	
58	inner of two rocks off pier to be kept with. hand of Ld.	
59	E buty of new in range	
60	E edge reef in line	
61	W edge " not quite on.	

SOUNDINGS

Locality

Main, T. N.

Year 1924 Month June

Day of Month 19

11-740

POSITION NUMBER.	TIME		SOUNDINGS		RED. FOR TIDE	REDUCED SOUNDINGS		BOTTOM
	MER.	M.	FEET	TENTHS		FEET	TENTHS	
A. 1/4.					✓			
1	7	34 30	6	0	0.0	36	0	sand with rich coral
		35 30	5	2		32	0	
		36 30	5	0		30	0	
		37 30	4	4		28	6	
2		38 00	4	3		27	0	
		38 30	4	1		25	0	
		39 00	3	5		23	0	
3		39 30	3	3		21	6	
		40 00	3	0		18	0	
4		40 30	2	5		17	0	
5		8 05	3	2		20	0	
6		8 06	3	4		22	0	
7		8 06 30	3	5		23	0	
8		8 07 00	4	6		24	0	
9		8 08 00	4	1		25	0	
10		8 09 00	4	2		26	0	
11		8 09 30	4	3		27	0	
12		8 10 00	4	2		26	0	
13		8 10 30	4	2		26	8	
14		8 11 00	3	3		21	0	
15		8 30 00	3	2		20	0	
16		8 30 30	3	5		23	0	
17		8 31 00	4	1		25	0	
18		8 31 30	4	00		24	0	
19		8 32 00	4	2		26	3	
20		8 32 30	4	2		26	0	
21		8 33 00	4	3		27	0	
22		8 34 00	4	2		26	0	
23		8 36 00	4	1		25	0	
24		8 38 00	4	0		24	0	
25		8 40 00	3	5		23	0	
26		8 43 00	3	2		20	0	
27		8 46 00	3	0		18	0	
28		8 48 00	2	5		17	0	

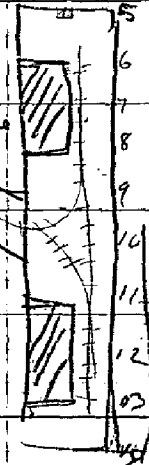
sand with black & coral

Sublocality *Heavy boat* *heavy boat* *plantation*

Boat used

day

11-740

BOAT'S HEAD BY COMPASS	ANGLES AND RANGES	REMARKS AND COURSE
1	Point 94 10 9	summit
	Range (front)	escarp into
	near	long pass
		between heavy
	<i>repts.</i>	
2	E end of wharf in line.	
3	W end 4 1 7	
4	Point 113 24 line	
	Range 129 10 ends	
	W end (corolla)	close by
		near mouth.
Summit 5 - 24 are around dock as for lowest 5 is at W outer corner, 6 is in line W edge of wharf house; 7 is mid " " 8 is in line E edge of wharf house 9 " " " " E " " 10 " 4/3 " " " " " 11 " in line W edge of wharf house; 12 " " " mid " " " 13 " " " E " " " 14 " at E cor wharf 15 off E cor, in line with 28 27 N of line from dist for width of plot of pos center. 16 is diag. of cor. same dist as width wharf. 17 is off wharf equal dist to width, opposite 18 is off 13 19 " " 12 20 " " 11 21 " " 10 22 " " 9 23 " " 8 24 " " 7 25 " " 6 26 " " 5 27 is diag. off cor. same as 16 28 same relation pos. 62 15		
		
		28 28 29 28 30 29 31 27 32 27 33 22 34 21 35 21 36 19 37 18 38 19 39 16

SOUNDINGS

Year 1924 Month June Day of Month 9

POSITION NUMBER.	TIME	SOUNDINGS			RED. FOR TIDE	REDUCED SOUNDINGS		BOTTOM
		FEET	TENTHS	FEET		TENTHS		
Fathoms	Feet	Feet	Fathoms	Feet				
	A ^{h.} M. ^{s.}							
29	9 12 00	2	5	✓ 0	17	0		
	12 30	2	5	0	17	0		
	13 00	3	0		18	0		
	13 30	3	1		19	0		
	14 00	3	1		19	0		
	14 30	3	2		20	0		
	15 0	3	3		21	0		
	15 30	3	3		21	0		
30	16 00	3	5		23	0		
	16 30	3	4		22	0		
	17 00	3	4		22	0		
	17 30	3	5		23	0		
	18 00	4	0		24	0		
	18 30	4	1		25	0		
	19 00	4	1		25	0		
	19 30	4	2		26	0		
	20 00	4	1		25	0		
31	20 30	4	2		26	0		
	21 00	4	2		26	0		
	21 30	4	3		27	0		
	22 00	4	3		27	0		
	22 30	4	3		27	0		
	23 00	4	4		28	0		
	23 30	4	4		28	0		
	24 00	4	4		28	0		
	24 30	4	5		29	0		
32	25 00	4	5		29	0		
33	6 33 00	3	0					
33	10 30	3	2		20	0		
	38 00	4	0		24	0		
	39 30	4	1		25	0		
	40 00	4	2		26	0		

35 41 00 4 4 28 0
41 30 4 4 28 0

1st day
 Sublocality
 beam, whaleboat

7

Boat used

day

11-740

BOAT'S HEAD BY COMPASS	ANGLES AND RANGES	REMARKS AND COURSE
29	Pinn 150 10 Fins 109 35 Mast 109 35	starts near old dock runs out E. (plots here)
30	Pinn 120 00 Fins 97 05 Mast 97 05	in line heady dock. fresh E by wind
31	Pinn 111 00 Fins 90 36 Mast 90 36	in line heady dock.
32	Pinn 108 35 Fins 90 32 Mast 90 32	stops accb. ✓ in line
33	Pinn 108 42 Fins 124 25 Mast 124 25	stops in line accb. ✓ E
34	Pinn 98 47 Fins 86 20 Mast 86 20	in line E edge of dock.
35	Pinn 89 22 Fins 58 45 Mast 58 45	in line

SOUNDINGS

Year 1924 Month

Day of Month 19

POSITION NUMBER.	TIME	SOUNDINGS		RED. FATH. TIDE	REDUCED SOUNDINGS		BOTTOM
		FEET	TENTHS		FEET	TENTHS	
	M.	Fathoms	Feet	Feet	Fathoms	Feet	
	h. m.						
	10 47 30	4 4	0.0	28	0		
	48 00	5.4		34	0		
	48 00	6.00		36	0		
	48 30	6 4		40	0		
	49 00	5 5		35	0		
	49 30	5 0					
	10 49 30	5 1		31	0		
	37 10 50 00	4 4		25	0		
	P. M.						
	38 12 24 00	2 5	1.0	16	0		
	24 30	3 00		17	0		
	25 00	3 2		19	0		
	25 30	3 4		21	0		
39	26 00	3 4		26	0		
	26 30	4 5		28	0		
	27 00	4 1		24	0		
	27 30	4 3		26	0		
	28 00	4 4		27	0		
40	28 30	5 0		29	0		
	29 00	5 3		32	0		
41	29 30	6 00		35	0		
	30 00	6 1		36	0		
	30 30	6 2		37	0		
	31 00	6 2		37	0		
	31 30	6 2		37	0		
42	32 00	6 3		38	0		
	32 30	6 2		37	0		
	33 00	6 3		38	0		
	33 30	6 3		38	0		
	34 00	6 3		38	0		
	34 30	7 0		41	8		
	35 00	7 0		41	8		
43	35 30	8 0		42	0		
	36 00						
	36 30						
	44 51 30	8 0					
	52 00	8 0					

Havabone

Sublocality

8

Boat used from Wharf, 6 day

11-740

BOAT'S HEAD
BY COMPASS

ANGLES AND RANGES

REMARKS
AND
COURSE

fresh E.
wind.

37

Pin 7940
Front
Rear 4230

slightly
over horizon
back rain

38

Pin
Front
Rear

slightly
inshore,
near E.
low sun

38

Pin 9626
Front
Rear (at cliff) 10534

R. 12, fairly
inshore

39

W edge of bay in line

40

E " " " "

41

Pin 8647
Front
Rear 10230

line tank
longer
red buoy.

42

buoy (E) and Remembrance

43

Pin 7720
Front
Rear 4715

line cut
observed H.

44

Pin 4910
Boat (near)
Rear 5500

slightly near
L. H. near
in the horizon
buoy
in range

SOUNDINGS

Year 19 *24* Month *June* Day of Month *19*

POSITION NUMBER.	TIME		SOUNDINGS		REDUCED SOUNDINGS		BOTTOM	
	MER.	M.	FEET	TENTHS	REF. FOR TIDE	FEET		TENTHS
Fathoms	Feet	Feet	Fathoms	Feet				
	h. m. s.							
	P.M.							
	12	52 30	8.0		1.0	8.0	0.0	47
		33 00	8.0			8.0	0.0	
45		53 30	6.0			35.0	0.0	
46		54 00	5.1			30.0	0.0	
		34 30	4.2			25.0	0.0	
		55 00	5.5			34.0	0.0	
47		55 30	5.0			29.0	0.0	
		56 00	4.00			23.0	0.0	
		56 30	3.5			22.0	0.0	
		57 00	4.0			23.0	0.0	
		57 30	4.4			27.0	0.0	
48		58 00	5.2			31.0	0.0	
		58 30	6.0			35.0	0.0	
		59 00	5.5			34.0	0.0	
49		59 30	6.3			32.0	0.0	
	1	00 00	6.3			38.0	0.0	
		30	6.3			38.0	0.0	
		1 00	6.2			27.0	0.0	
		1 30	6.1			36.0	0.0	
		2 00	6.0			35.0	0.0	
		2 30	6.0			35.0	0.0	
50		3 00	5.4			33.0	0.0	
		3 30	5.3			32.0	0.0	
		4 00	5.1			30.0	0.0	
		4 30	5.0			29.0	0.0	
51		5 00	4.3			26.0	0.0	
		5 30	4.1			24.0	0.0	
		6 00	4.0			23.0	0.0	
52		6 30	3.4			21.0	0.0	
53		7 00	3.2			19.0	0.0	

11-740

BOAT'S HEAD BY COMPASS	ANGLES AND RANGES	REMARKS AND COURSE
45	Off port beam	
46	break (Wing) in range, "new"	
47	Periscope 72 20 Faint 61 50 new	✓
48	Periscope, middle moon buoy, abeam 20 m off port.	
49	Periscope 76 54 Faint 97 15 new	✓
50	Edge of wharf in line	
51	opposite middle wharf.	
52	edge of wharf	
53	at the main buoy.	

FORM 275

Locality

SOUNDINGS

Maui T.B.

Year 1924

Month

June

Day of Month

19

11-740
 Locality
 11-740

10

Boat used theory wheelboat, day

BOAT'S HEAD BY COMPASS	ANGLES AND RANGES	REMARKS AND COURSE
54	Pen 10830 Front 12755 New (probably 664)	in plank cushion and covers and covers main body
55	in line with deck	
56	" " middle "	
57	" " Edge "	
58	Pen 9650 Front New 9716	
59	Emerson in "New"	
60	Pen 8309 Front New 5548	
61	Now and only big chris large	
62	Pen 6905 Front New 3415	end of just # of main body new body
searching for		
63	Pen 7249 Front New 3546	
	Pen 7315 (near)	
	Front 3627	
	New 7327	
	Front 3640	
	New	

Tide reducers approved
 Division Tide, etc. 7/26/24

SOUNDINGS

Year 19

Month

Day of Month

[illegible]

Report on Hydrography shown on Top. Sheet No 4059

The hydrography done in Hana Cove, consists of two days work. Part of the work is controlled by three point fixes and the balance by cross ranges. Everything was verified with the exception of a few ranges, which could not be identified. These were shown in the same position in which they had been plotted by the field party.

The record is not well kept and is hard to decipher in places.

R. L. Johnston

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ists". That certainly exists - but it is not a sunken rock but rather an extensive patch: it is nearly always breaking. It is well developed on the Harbor Commission plat. However there actually IS a rock, but it is in another locality - further out, just NNW of channel buoy No. 2, and therefore off the steamer track. Hearing rumors of this rock I first went to the top of the overhanging cliffs of Kauiki Head from which point of vantage I easily saw indications of it. So, knowing that the Harbor Commission had already found twenty one feet in that spot but that a vessel drawing less was said recently to have struck there I went out intending to get a shoaler sounding if there was one as I assumed. I spent an entire afternoon hovering about this rock, trying for a shoaler value. I at last got a sixteen, reduced. This was the least I could find. I verified the 21 pin-

4-VEC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

September 18, 1924.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4059

Hana, T. Hawaii

Surveyed in 1924

This survey includes a hydrographic examination of Hana Bay.

Instructions dated March 25, 1924

Chief of Party, E. R. Hand.

Surveyed and drawn by E. R. Hand.

Hydrography plotted and verified and inked by R. L. Johnston.

1. The Topographic records conform to the requirements of the General Instructions. The sounding record does not conform to the requirements, but this is accounted for by the surveyor because the work is an examination only rather than a complete survey.
2. The plan and character of the topographic survey conform to the requirements of the General Instructions.
3. The plan and extent of the topographic and hydrographic surveys satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The topographic drawing was done in the field, but the hydrographic

7. The junction with the adjoining topographic survey is satisfactory.
8. No further surveying is required within the area covered by the sheet.
9. The character and scope of the topographic surveying are excellent - that of the hydrographic work is satisfactory.
10. Reviewed by E. P. Ellis, September, 1924.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

confidential

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4059

State . . . Territory of Hawaii

General locality . . Island of Maui

Locality Hana

Chief of party Eoline R. Hand,

Surveyed by " " " "

Date of survey June, 1924

Scale 1 : 5000

Heights in feet above . . MHW

Contour interval . . . 20 feet.

Inked by Eoline R. Hand . Lettered by Eoline R. Hand

Records accompanying sheet (check those forwarded): Photograph # of range

Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet . bromide of Board arb. Comm,
bromide topog. sheet 3274 hyd. survey (in six sec-
tions)

Remarks: