

5096

Diag. Cht. No. 5502-R

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 23 1931

State: California.

Acc. No. _____

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. **3.** 5096
Hydrographic }

LOCALITY

~~From vicinity Timber Cove to~~
~~one mile north of Horseshoe Point.~~

Northern Cal.

Timber Cove to Horseshoe Pt.

1930.

CHIEF OF PARTY

L. C. Johnson.

5096

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5096

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. 3

REGISTER NO. 5096

State California

General locality Northern California

Locality Timbar Cove to ~~and~~ north of Horse shoe Pt.

Scale 1 - 10000 Date of survey Aug - Sept
June - October, 19 30.

Vessel Chartered Launch "BOGIE"

Chief of Party L.G. Johnson

Surveyed by L.G. Johnson

Protracted by Robert A. Marshall

Soundings penciled by Robert A. Marshall

Soundings in fathoms feet

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated April 29, 19 30.

Remarks:

DESCRIPTIVE REPORT

to accompany Hydrographic Sheet No. 3.

(1) Date of Instructions.

This work was performed in accordance with the Directors instructions dated April 29, 1930.

(2) Limits and Scale.

This sheet covers the area extending from the shoreline to approximately a mile offshore and from a junction with sheet #2 in latitude 38 - 41.5 longitude 123 - 29.1 to a junction with sheet #4 in latitude 38 - 36.8 longitude 123 - 24.2.

The work is shown on a projection of 1:10000 scale.

(3) Survey Methods.

All signals were plotted from a list of plane table positions furnished by the office from field sheets "N", F.B.T.Siems, 1929, and from field sheet "A" this party or were located by triangulation.

The hydrography was executed in the usual manner from the charted launch "Rogue" using the hand lead up to 15 fathoms and the hand sounding machine for greater depths. Positions were fixed by the usual sextant angles.

No unusual methods were employed.

(4) Dangers, Shoals and Discrepancies.

Several sunken rocks were located which had not been located by the topographer as follows;

Rocky patch, position 78N, 240 meters W \odot SIP awash at MLLW.

Rocky patch of small area, position 35N, 340 meters NW \odot BUN with approximately 3 feet of water on it at MLLW. *No allowance made for tide. 5 ft of tide at this time, should be rocks awash.*

A shoal area 280 meters WSW \odot WED was found and developed.

A least depth of 2 4/6 fathoms was found on position 107M. *Plotted as rock awash at MLLW. See note in edg-record - R.L.G.*

A sunken rock, position 88K, 140 meters SW \odot RBE awash during heavy swell.

A shoal area 390 meters SW \odot ZAB was developed and found to have a least depth of 5 4/6 fathoms on position 7L.

A small area 400 meters SW Δ STOCKOFF 2, marked by kelp, was developed and 4 fathoms on position 80L was the least depth found after a through search.

A larger area 790 meters SW Δ STOCKOFF 2 was developed and 3 5/6 fathoms on position 110L, marked by kelp, was the least depth found after drifting over the shoal and a through search made with the hand lead.

A shoal area ¹¹⁶⁰ 1230 meters SW Δ Wilson, was developed and the least depth was 14 5/6 fathoms found on position 17M.

The shoal area 438 meters SW ○ BET was developed and found to have a least depth of 6 5/6 fathoms on positions 173 - 174F.

Another shoal area 610 meters WSW ○ CY was developed and a least depth of 13 fathoms was found on positions 77-78A and 69E.

540 meters W of ○ UKE a small shoal was found with the least depth on positions 145 - 146K Of 9½ fathoms. ✓

(5) DISCREPANCIES.

There were no discrepancies. The junctions with sheet #2 to the north and #4 to the south were both good.

(6) ANCHORAGES.

There are no suitable anchorages for vessels other than small craft and even for small craft these anchorages afford little shelter if a NW'ly swell is running.

The eye bolts in the rocks ashore and the buoys used in days gone by are no longer in evidence.

These anchorages are good only for shelter in case the weather is from the North or Northwesterly.

(7) COMPARISON WITH PREVIOUS SURVEYS.

A through comparison was made with the previous surveys in this locality and generally found to be good. The present survey shows much more development and a better view of the relief is thereby visible.

GEOGRAPHIC NAMES.

(8) All geographic names in general usage by local inhabitants are shown on Topographic sheet Field No. A, this party.

(9) TIDE DATA.

All hydrography on this sheet is referred to a portable automatic gauge maintained at Fort Ross, Cove, Fort Ross California.

(10) CONCLUSION.

Accompanying this report is a table of statistics and a tide data sheet.

Respectfully submitted,

L. C. Johnson.
L. C. Johnson, Jr. H. & G. E.
Chief of Party, USC&GS.

STATISTICS
HYDROGRAPHIC SHEET No. 3

No. of Positions

No. of Soundings

No. of Miles of
Sounding Lines.

1470

3248

145.8

APPROVAL SHEET

to accompany Hydrographic Sheet "3"

Timber Cove to Horseshoe Point, California.

This sheet has been examined and is approved; the records
pertaining to this sheet have been examined and are approved.

L. C. Johnson
L. C. Johnson, Jr. H. & G. E.
Chief of Party, C. & G. S.

July 27, 1931

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5096

Locality Timber Cove to Horseshoe Point, Northern Coast of Calif.

Chief of Party: L. C. Johnson in 1930
Plane of reference is mean lower low water, reading
5.2 ft. on tide staff at Fort Ross
7.1 ft. below B. M. 1

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 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.

Hammner
Acty Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5096

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	1470
Number of positions checked	574
Number of positions revised	47
Number of soundings recorded	3248
Number of soundings revised	37
Number of signals erroneously plotted or transferred	✓

Date: Aug. 20, 1931

Cartographer: G. H. Streeter

Section 1 Field Records

Report on H-5096

Chief of Party L. C. Johnson
Projected by R. A. Marshall
Verified + inked by G. H. Streeten

Surveyed by L. C. J.
Soundings plotted by R. A. M.
Topography inked by Field Party

1. The records conform to the requirements of the general instructions with the exception that turns in lines were not always recorded.
2. The usual depth curves can be drawn.
3. The majority of bottom characteristics were not penciled on the smooth sheet and what few that were indicated were not in the proper place otherwise the field plotting was completed.
4. Rocks transferred from the topo. sheets were carelessly plotted making it necessary for the office draftsman to replot several and add many that were omitted.
5. The junction with 5097 is satisfactory.
6. The quality of the field drafting is poor.

Respectfully submitted,
G. H. Streeten

Aug. 20, 1931

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 5096
Northern Coast of California
Surveyed in 1930
Machine and hand lead soundings
Instructions dated April 29, 1930 (Lieut. L. C. Johnson)

Chief of Party - L. C. Johnson
Surveyed by - L. C. Johnson
Protracted and soundings plotted by - R. A. Marshall
Verified and inked by - G. H. Streeter

1. The records conform to the requirements of the Hydrographic Manual.
2. The plan, character and extent of the survey satisfy the general and specific instructions except that par. 16, which calls for the investigation of sunken rocks and shoals from the old surveys, was not complied with.
3. The sounding line crossings are generally satisfactory.
4. The information is sufficient for completely drawing the 10 and 20 fathom curves. The curves for shoaler depths, close inshore, can be partially indicated.
5. The junction on the north with H. 5095 is satisfactory and the junction on the south with H. 5097 is also satisfactory. There is no contemporary survey off shore from this work at the present time.
6. Comparison with previous surveys.

The rocks as shown on the old topographic sheets T. 1497a and T. 1457 generally agree approximately with the rocks on the new topographic sheets T. 4508 and T. 4593, except that many shown as bare rocks on the old surveys were found to be rocks awash.

The hydrographic survey of 1880, H. 1471b agrees fairly well with the new work but there is more development on H. 5096 and it is believed the latter should entirely supersede H. 1471b.

The general agreement with the other survey of 1880, H. 1471a, is also fairly good with the exception of one line on H. 1471a between Fisk Mill Cove and Miller Gulch, which has been rejected and has been so marked on that sheet. H. 5096 should generally supersede H. 1471a with the exception of several shoals and rocks which were checked in the records of H. 1471a and have not been investigated or disproved in the recent work. These have been added to H. 5096 in red.

A $6\frac{1}{4}$ fathom sounding in Lat. $38^{\circ}-33'.15''$; Long. $123^{\circ}-18.6'$ has been added to H. 5096 and should be retained.

Two pinnacle rocks with a depth of 7 and 11 feet over them in Gerstle Cove, Lat. $38^{\circ}-33.8'$, Long. $123^{\circ}-19.75'$, have been added to H. 5096. The new work shows one sounding of 11 fathoms in almost the same position. After

Report H. 5096.

an examination of the record of H. 1471a, pos. 17g and pos. 18g (red), it is thought that owing to the method of locating them (angle between ship and shore object and cut from ship) the position of these rocks may be somewhat in error but that the depths are correct and were obtained at some point close to the position in which they are shown. It was decided to accept the rocks as shown on H. 1471a and they should be retained on the chart until further investigated.

Two sunken rocks, which are located from the records of H. 1471a, N.W. from Salt Pt. were added to H. 5096.

It is noted that on the northern part of H. 1471a there are some small bare rocks shown rather close inshore. Some of these rocks are not shown on the contemporary topographic sheet, T. 1497a, and there is no authority in the records of H. 1471a for them. None of these rocks were added to H. 5096 as it is probable that the old topographic sheet was not transferred correctly.

7. The field plotting was completed to the prescribed extent. The protracting and plotting of soundings was well done but rocks and other features outside of the shoreline were not accurately transferred.

8. Character and scope of surveying.

Outside of the fact that the critical soundings on the old survey were not examined and the fact that the hydrographic party furnished very little data about off lying rocks, (most of this was taken from Topo. sheets), this survey is considered excellent.

9. The following soundings and rocks, which are from H. 1471a and have been described in par. 6, need further investigation.

- a. The $6\frac{1}{4}$ fm., rocky bottom, sounding near Walsh Landing.
- b. The two pinnacle rocks with depths of 7 feet and 11 feet over them in Gerstle Cove.
- c. The two sunken rocks, approximately one half mile northwest from Salt Point.
- d. The development of the shoaling in Lat. $38^{\circ}-32'.3$, Long. $123^{\circ}-18'.4$ is hardly close enough to give any assurance that the least depth has been found and a further examination would be desirable.

10. Reviewed by R. L. Johnston - Oct. 9, 1931.

Sheet Inspected by - A. L. Shalowitz.

Approved: A. M. Sobieralski. (*Signed*)