

5393

5393

Form 504  
Ed. June, 1928

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

U. S. COAST & GEODETIC SURVEY  
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FEB 20 1934

State: CALIFORNIA

Acc. No. \_\_\_\_\_

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. 9 5393

Hydrographic

LOCALITY

Monterey Bay

Soquel Cove.

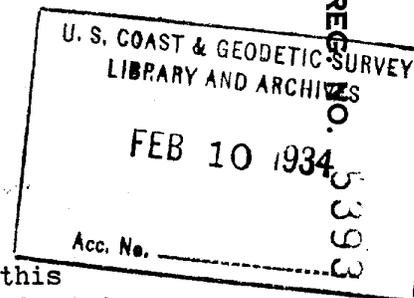
1932-33

CHIEF OF PARTY

Fred L. Peacock.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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. 9

REGISTER NO. 5393

State California

General locality Monterey Bay

Locality Soquel Cove

Scale 1 : 10,000 Date of survey December 17, 1932 to May 24, 1933, 19

Vessel Chartered Launches ROGUE and OHIO No. 3

Chief of Party Fred. L. Peacock

Surveyed by Walter J. Chovan, A. Newton Stewart

Protracted by R. D. Dwell

Soundings penciled by R. D. Dwell

Soundings in fathoms feet

Plane of reference M L L W

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by \_\_\_\_\_

Verified by \_\_\_\_\_

Instructions dated April 4, 1932

Remarks: Hand lead sounding

Visual fix control.

DESCRIPTIVE REPORT  
to accompany  
HYDROGRAPHIC SHEET FIELD NO. 9  
Project No. 101  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1932-1933

INSTRUCTIONS: Instructions for the hydrography on this sheet are dated April 4, 1932. ✓

LOCALITY: The hydrography on this sheet covers the inshore area in the northern end of Monterey Bay east of Longitude  $121^{\circ} 59'0''$  and north of Latitude  $36^{\circ} 55'0''$ . ✓

LIMITS: This sheet joins Launch Sheet Field No. 8 on the west. On the south it joins Ship Sheet Field No. 45 and Launch Sheet Field No. 21. These sheets are of Project No. 101. On the south it joins also Sheet Field No. 1 of Project No. 130. ✓

CHARACTER OF WORK: The hydrography on this sheet is all hand lead sounding, with visual fix control. Occasionally in the deeper water it will be noted that the stop and back method used for control of machine soundings between fixes was reverted to, though the hand lead was used in place of the machine. ✓

Sounding lines are spaced approximately 90 meters inside the ten fathom curve and 180 meters in greater depths. ✓

Cross lines are spaced not over two miles apart. ✓

The position interval ranges from one and one half minutes in the shoal depths to about three minutes in the deeper water. ✓

The scale of this sheet is 1:10,000. ✓

The hydrography on this sheet was executed between December 17, 1932 and May 24, 1933. A party using the chartered Launch ROGUE did work on December 17th and 18th before closing the 1932 field season. A party using the chartered Launch OHIO #3 resumed hydrography on this sheet on April 28, 1933, using C day as its first day letter. ✓

**CONTROL:** The control for the hydrography on this sheet consists of points located by triangulation in 1931 by Lieutenant C. D. Meany and of topographic signals located by the 1932 topographic unit of the Ship GUIDE's party.

There is one hydrographic signal located by the hydrographic party in 1933. The fixes and cuts for the location of this signal are recorded in the sounding volume No. 1, Gig, of Sheet Field No. 8. <sup>H-51734</sup> This signal is plotted on sheet No. 8 and transferred to sheet No. 9 as the fixes used cannot be plotted on sheet No. 9. The position of a second hydrographic signal is recorded on page 2, sounding volume No. 4, of this sheet.

All above positions are plotted on the North American 1927 Adjusted Datum.

**TIDAL REDUCERS:** Tidal reducers were obtained from the records of the Santa Cruz Tide Station. No correction was applied for either time or range.

The operation of the tide gage at this station was discontinued following the close of the 1932 field season. The gage was re-established on April 17, 1933, prior to the time the Launch OHIO #5 started hydrography on this sheet. The tide staff was removed during the period the gage was not in operation but <sup>and</sup> a new staff was replaced in the same position and was connected to bench marks when the gage was re-established. The staff reading for mean lower low water is the same for the 1933 period of operation as it was for the 1932 period.

For further information on this subject the reader is referred to the Season's Tidal Report which covers all the tidal work for the Ship GUIDE's party from April 29, 1932 to February 28, 1933.

**LEADLINE CORRECTIONS:** It should be noted that considerable trouble was had due to shrinkage of leadlines. Leadlines were checked regularly before and after each days work and often at noon. Corrections to soundings were obtained by direct proportion between the times of the corrections.

**BOTTOM CHARACTERISTICS:** Numerous bottom characteristics well distributed over the area were obtained. The bottom is sandy over almost the entire sheet, but is rocky close inshore west of Longitude  $121^{\circ} 55'$ .

DANGERS AND SHOALS: With the possible exception of the close inshore area at Soquel Point there are no dangers on this sheet. ✓

JUNCTIONS: Satisfactory junctions have been obtained with Launch Sheet Field No. 8 on the west and Launch Sheet Field No. 21 on the south.

*Plotted on #5247*

#5247

The junction with Ship Sheet No. 45 on the south is satisfactory except that there is occasional irregularity in the fathometer soundings on that ship sheet. This irregularity is believed the result of excessive end play in the fathometer gear shaft. ✓

A junction with Launch Sheet No. 1, Project No. 150 on the south is satisfactory except for a failure to overlap properly for a distance of one half mile. ✓

COMPARISON WITH PREVIOUS SURVEYS: Previous surveys of this area are covered by sheets Nos. 504, 558, 560 and 561. The soundings and depth curves agree with but minor variations. The newer survey, being in greater detail, gives a better delineation of the depth curves. ✓

Respectfully submitted,

*Walter J. Chovan*

Walter J. Chovan,  
Jr. H. & G. Engineer,  
U.S.C. & G. Survey.

*A. Newton Stewart*

A. Newton Stewart,  
Jr. H. & G. Engineer,  
U.S.C. & G. Survey.

Respectfully forwarded,  
approved:

*Fred. L. Peacock*

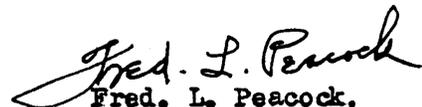
Fred. L. Peacock,  
Chief of Party, C. & G. Survey,  
Commanding Ship GUIDE.

STATEMENT  
to accompany  
HYDROGRAPHIC SHEET FIELD NO. 9  
Project No. 101  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1932-1933

The protracting of this sheet and the plotting of the soundings was done by Mr. R. D. Dewell, civil engineering hand, under the direct supervision of Lieutenant (j.g.) L. W. Swanson.

At least ten percent of the protracting and ten percent of the penciled soundings were verified by Lieutenant (j.g.) A. Newton Stewart.

The depth curves were drawn by Lieutenant Stewart. The completed smooth sheet has been examined and is approved. However, as much of the work was done by a temporary employee it is recommended that the office verification be correspondingly rigid.

  
Fred. L. Peacock,  
Chief of Party, C. & G. S.,  
Commanding Ship GUIDE.

Oakland, California,  
February 1, 1934.

LIST OF SIGNALS  
to accompany  
HYDROGRAPHIC SHEET FIELD NO. 9  
Project No. 101  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1932-1933

TRIANGULATION

Hydrographic Name	Location
Sog	Sog, 1931
End	End of Dock, 1931
Bor	Bor, 1931
Mast	West Mast, Ship resort, 1931.
Rio	Stack, Hotel Rio Del Mar, 1931
Aptos	Aptos, 1931
Leon	Leon, 1931
Nard	Leonard, 1931
Duna	Duna, 1931

TOPOGRAPHIC

Stew	Topographic Sheet H
Abe	"
Sou	"
How	"
Tank	"
Hop	"
Green	"
Dirt	Topographic Sheet J
Rot	"
Tank	"
Hi	"
Wet	"
Eat	"
Fen	"
Ban	"
Sign	"
Whit	"
Water	"
Bath	"
Hot	"
Tre	"
Clo	"
Board	"
Mill	"
Bluff	"
Trim	"

(Continued on next page)

Hydrographic Name	Location
Gab	Topographic Sheet J
Flag	"
Brow	"
Red	"
Green	"
Po	"
Abe	"
Boy	"
Small	"
One	"
Two	"
Flagpole	"
S.P.	"
Man	"
Lit	"
Post	"
Yes	"
No	"
Did	"
Has	"
Ben	"
Pal	"
Steel	"
On	"
Tot	"
Met	"
Work	"
Him	"

**HYDROGRAPHIC**

Sig           Sounding Volume No. 1, Gig, Sheet Field No. 8  
New           Sounding Volume No. 4, OHIO #3, Sheet Field No. 9

**STATISTICS**  
 to accompany  
**HYDROGRAPHIC SHEET FIELD NO. 9**  
**Project No. 101**  
**Coast of California**  
**U.S.C. & G.S.S. GUIDE**  
**1932-1933**

Date 1932-33	Day	Statute Miles Sounding Line	No. of Positions	No. of Sounding.
<b>ROGUE-1932</b>				
12-17	a	25.1	112	421
12-18	b	25.4	122	402
<b>Totals ROGUE</b>		<b>50.5</b>	<b>234</b>	<b>823</b>
<b>OHIO #3-1933</b>				
4-28	c	24.2	106	445
4-29	d	23.6	127	378
5-2	e	11.6	106	304
5-9	f	36.8	193	519
5-10	g	32.2	223	638
5-13	h	19.5	127	381
5-15	j	29.3	198	581
5-16	k	37.4	269	712
5-17	l	36.2	249	1094
5-18	m	20.7	143	508
5-19	n	19.5	120	368
5-20	p	11.7	130	390
5-21	q	9.2	63	142
5-22	r	6.9	46	90
5-24	s	6.0	84	240
<b>Totals OHIO #3</b>		<b>324.8</b>	<b>2384</b>	<b>6790</b>
<b>TOTALS</b>		<b>375.3</b>	<b>2618</b>	<b>7613</b>
Area in square statute miles - ROGUE 4.9				
OHIO #3 18.1				
<b>TOTAL</b>		<b>23.0</b>		

Lic

February 24, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in  
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5393

Locality Monterey Bay, Soquel Cove, Coast of California

Chief of Party: Fred L. Peacock in 1932-1933

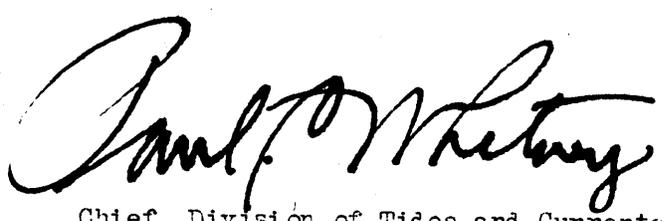
Plane of reference is mean lower low water, reading

3.0 ft. on tide staff at Santa Cruz

14.5 ft. below B. M. 2

Height of mean higher high water above plane of reference is 5.3 ft.

Condition of records satisfactory except as noted below:

  
Chief, Division of Tides and Currents

SECTION OF FIELD RECORDS

Report on sheet H. 5393.

Verified and inked by - Murray and Day.

The records conform satisfactorily with the General Instructions.

The ten fathom curve was completely drawn within the limits of the sheet. ✓

The five, three, two and one fathom curves were incompletely drawn in varying degree. ✓

The field plotting was completed to the extent prescribed in the General Instructions. ✓

It was not necessary to do over any part of the drafting done by the field party. ✓

The junction with the inshore sheet H. 5373a on the west was satisfactory. The junction with the inshore sheet H. 5405 on the southeast was not made, as that sheet has not been verified at this time. ✓

The junction with the off-shore sheet H. 5247 was satisfactory excepting the following notations:

Position	Approx. Difference in Soundings
Lat. 36° - 55.5' Long. 121° - 58.0'	5 fm.
" 36° - 55.3' " " - "	3 to 5 fm.
" " - 54.9' " " - 57.5'	3 fm.
" " - 55.2' " " - "	4 fm.

*Tenthometre readings too deep in this case, not functioning properly. See Disc. Rpt. H. 5393, 47. B.A.*

The following turns in the sounding lines were re-adjusted by Mr. Murray:

17p and 19p	Lat. 36° - 57.2' Long. 121° - 58.9'
53p and 55p	" 36° - 57.4' " " - 57.8'
190L and 191L)	
210L and 212L)	" 36° - 58.4' " 121° - 56.3'
224L and 227L)	
217L and 218L	" " " " - 55.3'

Position 11m at Lat. 36° - 56.7' Long. 121° - 52.7' was incorrectly plotted.

There is doubt as to the name of the topographic position TANK at approximate Lat. 36° - 57.5' Long. 121° 58.8' whether it be TAN or not.

Current topographic sheets covering this hydrographic sheet have not been received from the field at this time, hence the shore line, low

*→ Compared with topo T 4838*  
*RAG*

H. 5393 - 2.

water line and rocks, etc., have not been verified.

The field drafting was of good quality. ✓

Submitted by - J. W. Day.

April 21, 1934.

Section of Field Records

REVIEW OF HYDROGRAPHIC SHEET NO. 5393.

Soquel Cove, Monterey Bay, California.  
Surveyed Dec. 1932 - May 1933.  
Instructions dated April 4, 1932 (GUIDE).

Hand Lead Sounding - 3 Point Control.

Chief of Party - F. L. Peacock.  
Surveyed by - W. J. Chovan, A. N. Stewart.  
Protracted and soundings penciled by - R. D. Dewell.  
Verified and inked by - H. W. Murray and J. W. Day.

1. The records conform to the requirements of the Hydrographic Manual. One recorder did not use the standard abbreviation for gray bottom characteristic in the earlier part of the work.
2. The plan and extent of development conform to the regulations and satisfy the specific instructions except that a small gap was left in the junction between this sheet and H. 5405. Two additional lines should have been run southwest of Soquel Point to bring the development up to the general standard of the sheet.
3. Soundings are consistent and the depths at crossings of lines are in good agreement.
4. Depths curves can be drawn satisfactorily. Heavy kelp and breakers prevented closer development of part of the 3 fathom curve and the lesser curves.
5. Junction with H. 5373a is satisfactory. Junction with H. 5405 is satisfactory except that there is a small gap between the two sheets in an area of approximately 6 to 9 fathoms depth. The bottom in the vicinity is regular. The overlap with H. 5247 is generally adequate. Two of the lines from H. 5247 at southwest corner of this sheet (H. 5393) appeared consistently deeper by 2 to 5 fathoms. Inasmuch as the Descriptive Report for H. 5247 stated that the fathometer was not functioning properly at the time and later hand lead soundings to the eastward of this area agree well with depths on H. 5393, the two lines mentioned have been omitted from H. 5247 and appropriately marked in the sounding records.
6. Comparison with H. 504 (1855) and H. 560 and 561 (1856) inshore and H. 558 (1856) off shore, shows very close agreement. The present survey is in much greater detail and should supersede the above sheets for charting the area represented.  
  
Chart 5403 does not show the dock at Aptos, otherwise there is nothing to conflict with the present survey.
7. Field drafting was good. Low water line from topo 4838 was added to the sheet in the office.

8. Additional surveys. - No further surveys are deemed necessary at this time. Attention however is invited to the under-developed area southwest of Soquel Point and to the small gap in the development between this sheet and H. 5405.

9. Reviewed by - R. J. Christman, May - 1934.

Sheet Inspected by - A. L. S halowitz.

*K. T. Adams*  
K. T. Adams,  
Chief, Section of Field Records.

*F. S. Boden*  
Chief, Section of Field Work.

Examined and approved:

*L. O. Lobnitz*  
Chief, Division of Charts.

*G. H. de*  
Chief, Division of H. & T.

25 Jun 27, 1936  
L.H.