

4784

Diag. Cht. No. 5101-2

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. Lester Jones, Director

C. & G. SURVEY

L & A

APR 27 1928

Acc. No.

State: California

DESCRIPTIVE REPORT

~~Topographic~~ Sheet No. 2 4784  
Hydrographic

LOCALITY

SOUTHERN CALIFORNIA,

SUBMARINE VALLEY OFF REDONDO,

SANTA MONICA BAY, CALIF.

192 8

CHIEF OF PARTY

F. G. Engle, H. & G. E.

GOVERNMENT PRINTING OFFICE

4784

DESCRIPTIVE REPORT

T O A C C O M P A N Y

HYDROGRAPHIC SHEET - FIELD NO. 2 - - - - - SCALE 1:40,000

SUBMARINE VALLEY OFF REDONDO, SANTA MONICA BAY, CALIFORNIA.

The work on this sheet was done in accordance with Par., 20 and 21 Director's Instructions dated December 16, 1927.

The soundings are by fathometer and were corrected for salinity and temperature by factors from graph accompanying Sheet No. 4560 also the soundings under 100 fathoms were reduced by 1-1/2 fathoms a constant found from comparisons taken in conjunction with Sheet No. 4560.

In some places where the slopes were steep the echo was not sharp and it was not always possible to obtain the red light. This explains the missed soundings.

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No indication of the oil streak shown on the charts near the head of the valley was found.

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All positions were obtained by three point fixes on artificial objects located by triangulation.

Respectfully submitted,

  
F. G. Engle,  
H. & G. Engineer,  
Chief of Party.

STATISTICS FOR FIELD SHEET NO. 2

SUBMARINE VALLEY OFF REDONDO. SANTA MONICA BAY, CALIF.

<u>Date 1928</u>	<u>:Letter</u>	<u>: Volume</u>	<u>: Positions</u>	<u>: Soundings</u>	<u>: Miles(st.)</u>	<u>: Vessel</u>
Mar. 29	: A	: 1	: 67	: 392	: 47.2	: Ship
" 30	: B	: 1	: 51	: 364	: 38.9	: "
Totals -----			118	: 756	: 86.1	

May 26, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in  
1 volumes of sounding records for

HYDROGRAPHIC SHEET 4784

Locality: **SOUTHERN CALIFORNIA.**

Chief of Party: **F. G. Eagle, 1928.**

Plane of reference is **M. L. W.**  
**5.5** ft. on tide staff at **Los Angeles Harbor.**

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.

U.S. Coast and Geodetic Survey  
Field Section  
June 16, 1928

Report on Sheet 4784, California

Reference data:

Surveyed on March 29-30, 1928;  
Chief of party: E. G. Engle;  
Surveyed by E. G. Engle;  
Protracted by T. B. Reed;  
Soundings plotted by T. B. R.;  
Verified and inked by J. T. Stearns.

The specific instructions in accordance with which this survey was made are neither appended to the accompanying descriptive report nor explained in it, by thus making the history of the work considerably abridged and limiting the office draftsman's possibility of proper criticizing of the execution of the work. Particular uncertainty is about the limits of the survey and whether or not the field draftsman was justified not to plot the shorelines adjacent to the area of survey—there is an evidence that the shorelines are within limits of the sheet—and not to comply with other general

requirements.

Only ~~but~~ a few soundings plotted in the field are with incorrect interpolation of time intervals; no errors in the conversion.

A number of soundings are missed in the field book. This is explained by the existence of steep slopes at the sea bottom. The change in depth at a certain places of this sheet is rather abrupt and of a character suggesting ~~rather~~ very irregular sea bottom unless the soundings are not approximate at all. Some of the boat positions are plotted by <sup>the true</sup> angle, course, and time. There are no bottom characteristics given in the field book.

The field drafting is of a neat appearance; the projection is shown; lettering is legible; and the drafting conforms with the general instructions for field work.

J. T. Messer.

Respectfully Submitted.

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 17, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4784

Santa Monica Bay, California

Surveyed in 1928

Instructions dated December 16, 1927

Chief of Party, F. G. Engle.

Surveyed by party of Steamer DISCOVERER

Protracted and soundings plotted by T. B. Reed.

Verified and inked by J. T. Stessin.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions, except that no vertical casts nor bottom characteristics were obtained.
2. The plan and extent of the survey satisfy the specific instructions.
3. The sounding line crossings are adequate and the information is sufficient for drawing the usual depth curves.
4. The usual field plotting was done by the field party and was accurately executed.
5. All the work on this sheet was done with the fathometer. The overlap on the 1928 work on sheet 4559, also done with the fathometer, is excellent.

A careful comparison has been made with the soundings on H. 1340b and H. 1341a. The agreement between the old and new systems is as good as could be expected between contemporary leadline surveys, and the old work has been used in drawing the curves. The old work may be used in charting to fill in gaps if desired.

A considerable portion of the work is in moderately shoal areas, and the agreement with the old leadline work is so good that it may be considered that the fathometer gives soundings of acceptable accuracy in depths as shoal as 8 fathoms (the shoalest soundings obtained) and possibly less.

6. Line 16 B to 19 B, at the extreme eastern edge of the survey, has been rejected due to lack of control. This line includes a 60 fathom sounding which, while too uncertain in position and depth to plot, nevertheless clearly indicates that the submarine valley extends inshore nearly to the 43 fathom sounding on 1340b.
7. No further surveying is required.
8. The character and scope of the surveying and field drafting are excellent.
9. Reviewed by E. P. Ellis, August, 1928.

Approved:

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Chief, Section of Field Records (Charts)

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

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4784

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. 2

REGISTER NO. 4784

State California

General locality Southern Coast Point Fermin

Locality Santa Barbara Channel Santa Monica Bay off Redondo

Scale 1:40,000 Date of survey March 29 - 30, 1928

Vessel DISCOVERER

Chief of Party F. G. Engle

Surveyed by F. G. E.

Protracted by T. B. Reed

Soundings penciled by T. B. R.

Soundings in fathoms XXXX

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated December 16, 1927

Remarks: