

5306

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R.S. Patton, Director

State: California

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. 42 5306

LOCALITY

California

Santa Barbara Island

1932

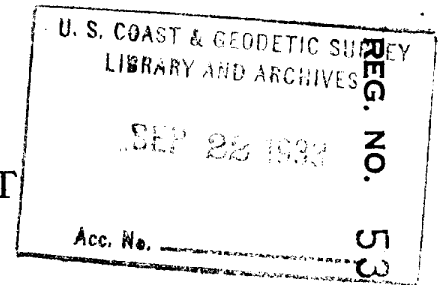
CHIEF OF PARTY

ROBERT W. KNOX

5306

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. 42

REGISTER NO. 5306

State CALIFORNIA

General locality Pacific Ocean ISLAND

Locality Around Santa Barbara I. (Offshore)

Scale 1:40,000 Date of survey Oct. 3, - Oct. 12, 19 32

Vessel Launch Virginia I.

Chief of Party ROBERT W. KNOX

Surveyed by ROBERT W. KNOX

Protracted by WILLIAM F. MAINATE

Soundings penciled by WILLIAM F. MAINATE

Soundings in fathoms feet

Plane of reference MLLW

Subdivision of wire dragged areas by _____

Inked by Helen M. Strong

Verified by _____

Instructions dated April 14, 19 32

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET NO. 42.

Scale: 1:40,000

SANTA BARBARA ISLAND

CALIFORNIA

INSTRUCTIONS DATED April 14, 1932.

SURVEYED BY R. W. KNOX.

SURVEY METHODS: Standard survey methods were used in the survey of the area covered by sheet No. 42. The gasoline driven sounding machine was located on the port side forward of the Launch Virginia I. A 28 lb. lead was used throughout the work. A system of sheaves and a boom, similar to the arrangement used on the larger vessels of the survey was used to rig the stranded wire over the side.

DISCREPANCIES: No discrepancies were noted in the work.

DANGERS AND SHOALS: There are no dangers or shoals in the area covered by this survey.

CHANNELS AND ANCHORAGES: There are no channels or anchorages in the area covered by this survey.

COMPARISON WITH PREVIOUS SURVEYS: Most of the soundings within the limits of this sheet appearing on Sheets 4447 and 4559 were transferred to the boat sheet for comparison. Of the soundings from sheet 4447, the southerly line appears to be satisfactory with the present survey. The northerly line, however, extending

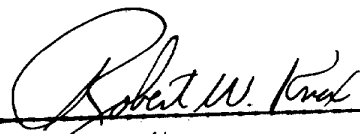
from lat. $33^{\circ} 32.0'$, long. $119^{\circ} 02.5'$ to lat. $33^{\circ} 30.2'$, long. $119^{\circ} 07.0'$, appears to be in error within the 100 fathom curve, in places as much as 50 fathoms.

The agreement between the soundings transferred from sheet 4559 is quite close throughout the area, with the exception of those appearing in the vicinity of lat. $33^{\circ} 29'$, long. $119^{\circ} 07'$ where the discrepancy is nearly 100 fathoms in one case. The fathometer failed to pick up the shoal in lat. $33^{\circ} 29.7'$, long. $119^{\circ} 05.0'$, where the shoalest sounding obtained by the launch was 25 fathoms, against 44 by the fathometer. It is possible, of course, that the ship line should be about 0.15 miles north and west of its plotted position.

CURRENTS: No currents of abnormal velocities were observed during the progress of the field work on sheet No. 42.

BOTTOM: The specimen obtained from the armed lead were about equally directed between "rocky", and "fine grey sand" with some "broken shell".

Respectfully submitted


H. M. S. Engi.

*The 44 fm sdgs
on H 4559
are tube sdgs
R.W.K.*

STATISTICS

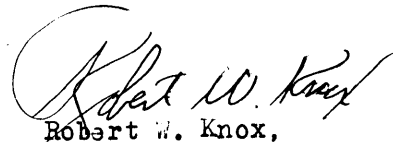
HYDROGRAPHIC FIELD SHEET NO. 42.

Date.	Vol.	Day.	St. mi. Sdgs.	Pos.	Sdgs.	Boat.
1932.						
Oct. 3.	1	A	10.2	43	74	VIRGINIA I
4	1	B	31.2	116	184	"
5	1	C	27.7	107	183	"
6	1	D	27.4	104	171	"
7	1	E	23.7	71	122	"
10	1	F	1.7	7	10	"
12	1	G	1.2	8	10	"
			123.1	456	754	

APPROVAL OF CHIEF OF PARTY

Field sheet No. 42 and accompanying records have been inspected and approved by me. The field work was done under my direct supervision; the office work under my occasional supervision.

No additional work is considered necessary.


Robert W. Knox,
H. & G. Eng'r,
Chief of Party

L20

October 12, 1933.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in.

1 volume of sounding records for

HYDROGRAPHIC SHEET 5306

Locality Around Santa Barbara Island, California Coast

Chief of Party: Robert W. Knox in 1932

Plane of reference is mean lower low water, reading

2.8 ft. on tide staff at Santa Barbara Island

9.1 ft. below B. M. 1

Height of mean higher high water above plane of reference is 5.1 feet

Condition of records satisfactory except as noted below:

Atg *Stannard*
Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. *H-5306*

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

Number of positions on sheet	<i>.456.</i>
Number of positions checked	<i>..21..</i>
Number of positions revised	<i>...17.</i>
Number of soundings recorded	<i>..754</i>
Number of soundings revised	<i>...2.</i>
Number of signals erroneously plotted or transferred	<i>.....</i>

Date: *Oct. 19, 1933*.....

Cartographer: *Helen M. Strong*.....

SECTION OF FIELD RECORDS

Report on H. 5306.
Chief of Party - Robert W. Knox.
Surveyed by - Robert W. Knox.
Protracted by - William F. Mainate.
Soundings plotted by - William F. Mainate.
Verified and inked by - Helen M. Strong.
No topography.

1. Work conformed to General Instructions. ~~Lead line corrections not at end of "g" day.~~
2. Usual depth curves could be completely drawn.
3. Field plotting completed according to General Instructions.
4. Seventeen positions had to be changed because angles were small, signals distant, and atmosphere not clear.
5. Adjacent sheet incomplete.
6. _____
7. Fair.

Submitted by - Helen M. Strong.

Oct. 19, 1933.

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5306.
Around Santa Barbara I., (Offshore) California.
Surveyed in 1932.
Instructions dated April 14, 1932. (R. W. Knox).

Chief of party - R. W. Knox.
Surveyed by - R. W. Knox.
Protracted and soundings plotted by - W. F. Malnate.
Verified and inked by - Helen M. Strong.

1. The records conform to the requirements of the Hydrographic Manual.
2. The plan and extent of the survey satisfy the specific instructions.
3. There are no cross lines. The agreement of adjacent lines is satisfactory.
4. The usual depth curves may be completely drawn.
5. The junction with the contemporary inshore sheet, H. 5305, is satisfactory.

Previous Surveys:

6. Several lines from the work of 1926, plotted on H. 4447, cross the work on this sheet.

The most northerly line of sonic soundings agrees very poorly, the discrepancies being about 50 fathoms. This line is plainly incorrect and has been so marked on H. 4447. The southerly line was replotted on H. 4447 and shifted slightly in order to obtain better agreement. In other places the soundings check very well.

The soundings from H. 4559 are a combination of sonic and tube soundings. They agree quite closely with the new work with the exception of one area in the general vicinity of Lat. 33°-29', Long. 119°-07'. The position of the lines from H. 4559 was verified from the records of that sheet but could not be changed. The control of these lines is not as strong as that of the new work and they are probably out of position. These soundings in this area have been crossed out on H. 4559 and will be superseded by those on H. 5306.

On the 25 fathom shoal in approximate Lat. 33°-29'.7, Long. 119°-05', the 44 fathom tube soundings from H. 4459 agree very well.

In the other areas where there is good agreement, the compiler should give the machine soundings from the recent survey, H. 5306, preference over those from H. 4459.

7. There are no dangers or shoals within the area covered by this survey and the ground has been sufficiently covered.
8. No additional work is required.
9. Reviewed by - R. L. Johnston.

R. L. Johnston
Chief, Field Records Section.

J. B. Dunder
Chief, Field Work Section.

Examined and approved:

W. F. Malnate
Chief, Chart Division.

G. F. Rude
Chief, H. & T. Division.

Applied to drawings of Plant 5202 Mar 1936 - R.M.Z.
" " " 5101 May 1936 R.M.Z.