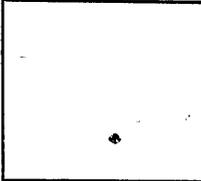


5304

5304

Form 504  
Ed. June, 1928

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



State: California

DESCRIPTIVE REPORT

*Hydrographic*  
Hydrographic

Sheet No. 41 5304

LOCALITY

California

San Nicolas Island

19.352

CHIEF OF PARTY

ROBERT W. KNOX

11

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5304

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. 41

REGISTER NO. 5304

State CALIFORNIA

General locality Pacific Ocean

Locality Vicinity of San Nicolas I.

Scale 1:40,000 Date of survey Aug. 11-Sept. 27., 19 33

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 MLIW.

Subdivision of wire dragged areas by

Inked by E.W. Smith

Verified by E.W. Smith

Instructions dated April 14., 19 32

Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET NO. 41

Scale: 1,40,000

SAN NICOLAS ISLAND

CALIFORNIA

INSTRUCTIONS DATED April 14, 1932.

SURVEYED BY R. W. KNOX, H. & G. ENGR.

SURVEY METHODS: Standard survey methods were used in the survey of the area covered by this sheet. The gasoline driven sounding machine was located on the port side, forward, of the launch Virginia. A system of sheaves and a boom, similar to those used on the larger vessels, was used to rig the wire over the side. A 28 lb. lead was found to be best suited for the machine and depths encountered.

DISCREPANCIES: No discrepancies were noted in the work. ✓

DANGERS & SHOALS: There are no dangers or shoals in the area covered by this sheet. ✓

The survey failed to check the reported 11 fathom shoal in lat.  $33^{\circ} 12.6'$  and long.  $119^{\circ} 21.4'$ . The depths encountered in that area were found to be in the order of 44-46 fathoms, and the bottom sandy.

CHANNELS & ANCHORAGES: There are no channels nor anchorages in the area covered by this sheet. ✓

COMPARISON WITH PREVIOUS SURVEYS: Soundings from sheet 4447,

*Letter 104/1932*

Scale 1:120,000, were transferred to the boat sheet, and in the main the agreement between those under a hundred fathoms was close. Several of the deeper over, however, failed to agree, as for example 1) in lat.  $33^{\circ}11.3'$ , long.  $119^{\circ}22.6'$ , the launch sounding was ~~334~~<sup>344</sup> fathoms, whereas the transferred sounding was 221; 2) two others, in approximately lat.  $33^{\circ}11.8'$ , long.  $118^{\circ}21.8'$  of 277 and 172, are apparently too deep. It was impossible to extend the sounding to a satisfactory junction with sheet 4447, in a southerly direction, as the southerly sounding in this area represented the limits of visibility of the signals; also, the sum of the two angles was in some cases as small as  $18^{\circ}$ .

CURRENTS: No currents of abnormal strength were observed in this area.

BOTTOM: The areas north and west of San Nicolas Island were found to have predominately rocky bottom, whereas that to the southeast was mostly sand and shell.

Respectfully submitted,



Chief of Party, H. & G. Engrs.

STATISTICS

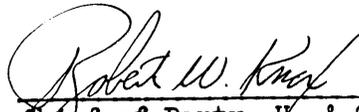
HYDROGRAPHIC FIELD SHEET NO. 41.

Date.	Vol.	Day.	St. mi.		Pos.	Sdgs.	Boat.
				Sdgs.			
1932.							
Aug. 11.	1	A	15.0		32	45	VIRGINIA I.
11.	1	B	8.9		33	47	"
Sept. 13.	1	C	3.1		14	14	"
14.	1	D	8.6		35	62	"
15.	1	E	9.1		33	53	"
21.	1	F			2	2	"
23.	1	G	16.5		50	77	"
24.	1	H	1.0		7	13	"
26.	1	J	3.4		14	22	"
27.	1	K	11.4		40	66	"
				77.0	260	401	

APPROVAL OF CHIEF OF PARTY:

Sheet No. 41 and accompanying records have been inspected and approved by me. The field and office work were done under my supervision.

No additional work is considered necessary.

A handwritten signature in cursive script, reading "Robert W. Knapp".

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Chief of Party, H. & G. Engr.

212

December 8, 1933.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in  
1 volume of sounding records for

HYDROGRAPHIC SHEET 5304

Locality San Nicolas Island, off Southern California

Chief of Party: Robt. W. Knox in 1932  
Plane of reference is mean lower low water, reading  
1.3 ft. on tide staff at San Nicolas Island  
12.1 ft. below B. M. 1

Height of mean higher high water above plane of reference is 4.9 feet.

Condition of records satisfactory except as noted below:

*W. H. Harnner*  
Chief, Division of Tides and Currents

SECTION OF FIELD RECORDS.

Report of : H-5304.

Surveyed in: Aug. 11--Sept. 27, 1932.

Chief of Party: R.W. Knox.

Surveyed by: R.W. Knox.

Protracted by: W.F. Malnate. ✓

Soundings plotted by: W.F. Malnate. ✓

Verified and inked by: E.W. Smith. ✓

Topography inked by: W.F. Malnate.

1. The records conform to the requirements of the General Instructions. ✓
2. The usual depth curves can be completely drawn in so far as these small areas are concerned. ✓
3. The following positions from (a) day were incorrectly plotted on the Smooth Sheet: 7-15-17-18-19. This error is doubtless due to the fact that the sum of the two angles in each case equal approximately 20-degrees, and sufficient care was not taken in their plotting. Position 16 (a) is marked with a (?) by the field party and the question is not clarified by any further note.

Hydrographic station "BANK" does not appear on the Topographic sheet for this area but does appear on both the Boat Sheet and Smooth Sheet. There was no note in the sounding records to furnish information for the plotting of this station, but it was used in the fixes for (k) day.

*Hydrog. transferred from H 5332-446*

4. None of the drafting done by the field party had to be done over by the office draftsman. ✓
5. The junctions with the adjacent sheets are satisfactory.
6. Numerous and considerable differences exist in the plotting of positions on the Boat Sheet and Smooth Sheet; also numerous differences in values of soundings exist in the two sheets. A careful verification of all positions on the smooth sheet was made and the difference in the two sheets explained by the weak fixes and inability to give pains to their plotting while making the survey. On (a) day there was a difference in the numbers assigned to the positions on the two sheets. ✓
7. The quality of the drafting is good, all work being inked very clear and distinct. ✓

Respectfully submitted: ✓

*Elbert W. Smith*

Elbert W. Smith,  
Cartographer.

Date: December 19, 1933.

SECTION OF FIELD RECORDS

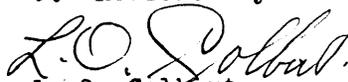
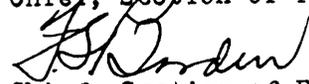
Review of Hydrographic Sheet No. 5304.  
Vicinity of San Nicolas Island, California.  
Surveyed August - September 1932.  
Instructions dated April 14, 1932 (Knox)

Chief of Party - R. W. Knox.  
Surveyed by - R. W. Knox.  
Protracted and soundings plotted by - W. F. Malnate.  
Verified and inked by - E. W. Smith.

1. The records conform to the requirements of the Hydrographic Manual except that no reference is made to the source and authority for the signals. They are the same signals that are used on the inshore sheet (H. 5332).
2. The plan and extent of development conform to the regulations and satisfy the specific instructions.
3. Soundings are consistent. They cover three small areas adjacent to and supplementing the inshore hydrography around San Nicolas Island; also an investigation that disproved the existence of a reported 11 fathom shoal, letter 104/1932 and 87/1933.
4. Depth curves can be drawn satisfactorily.
5. Junction with contemporary survey sheet H. 5332 will be reported with report on that sheet.
6. Comparison with H. 4447 (1925) shows fair agreement in depths less than 100 fathoms. In greater depths, steep slopes and the small scale of the sheet make close comparisons of little value. Depth curves on Chart 5202 will be changed slightly in details, no other changes are indicated by this sheet.
7. Field drafting was satisfactory. A few positions (notably on "a" day) were revised in the office. See verifier's report.
8. Recommendation. This sheet (H. 5304) should supersede all previous surveys for charting the area represented by it.

No further surveys are deemed necessary.

9. Reviewed by - R. J. Christman - December 28, 1933.

  
L. O. Colbert,  
Chief, Section of Field Records.  
  
Chief, Section of Field Work.

Examined and approved:

  
Chief, Division of Charts.  
  
Chief, Division of H. & T.

applied to drawing of Chart 5202 - Mar 1936 - R.M.Z.  
" " " " 5101 May 1936 R.M.Z.