

5523
5524

Diag. Cht. No. 5101-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 21 & 22 Office No. H-5523
H-5524

LOCALITY

State California
General locality San Pedro Channel
H-5523 South of San Pedro Bay
Locality H-5524 S. E. of San Pedro Bay

19A 34

CHIEF OF PARTY

Robert W. Knox

LIBRARY & ARCHIVES

DATE October 10, 1934

5524
5523

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
OCT 10 1934
REG. NO. 5523
Acc. No. _____

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. 21 5523 523

REGISTER NO.

State California 10

General locality San Pedro Channel 17

Locality Point South of San Pedro Bay 11

Scale 1:20,000 Date of survey July 17, 1933, 19
Sept 25, 1934

Vessel chartered launch Romance

Chief of Party Robert W. Knox

Surveyed by John C. Mathisson

Protracted by C. L. Rasmussen, N. Skansen, D. V. Radcliffe

Soundings penciled by R. W. Knox

Soundings in fathoms feet

Plane of reference mean lower low water

Subdivision of wire dragged areas by _____

Inked by James M. M. Luce

Verified by James M. M. Luce

Instructions dated February 17, 1933, 19

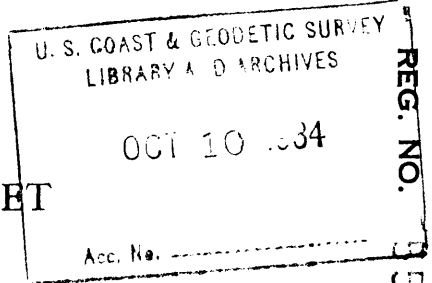
Remarks: _____

U. S. GOVERNMENT PRINTING OFFICE

appended to OHV 5147 - Feb 1935. J. S. Bunker

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. 22 5524

REGISTER NO.

State California

General locality San Pedro Channel

Locality S.E. of San Pedro Bay, on Beach

Scale 1:20 000 Date of survey Aug 15-Sept 25, 19 34

Vessel chartered launch Romance

Chief of Party Robert W. Knox

Surveyed by R W K

Protracted by N. Skansen, D. V. Radcliffe

Soundings penciled by R. W. K.

Soundings in fathoms feet

Plane of reference mean lower low water

Subdivision of wire dragged areas by _____

Inked by M. Schweber

Verified by M. Schweber

Instructions dated February 17, 1933, 19 _____

Remarks: _____

benchmarks attached - 4/20/33

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEETS NOS. 21 & 22

Scale 1:20 000

Southern California

San Pedro Bay

Instructions dated Feb. 17, 1933

Surveyed by R. W. Knox
John C. Mathisson

AREA, LIMITS. The area covered by sheets number 21 and 22 comprises the waters of San Pedro Bay between the ten and fifteen fathom curves and extending from Point Fermin east and south to the vicinity of Huntington Beach. The sheets make a junction with the several larger scaled inshore sheets, to the north, and with the work of the Steamer Pioneer, offshore.

SURVEY METHODS: Standard survey methods were used. The work on sheet 21, surveyed in 1933 by John C. Mathisson, was accomplished for the most part, with the aid of a trolley rig, a 36 pound lead being used. No trolley was used in the survey of sheet 22.

DISCREPANCIES. Discrepancies noted were confined to a few one-fathom differences in the crossing of lines. Most of the cases investigated proved to be due to a one or two foot difference in the soundings involved.

DANGERS AND SHOALS: There are no dangers in the area covered by these sheets. There is, however, a 11 fathom sounding in latitude 33° 40' 27.0m, longitude 118° 14' 6.0m, which is surrounded by soundings of 13 and 14 fathoms. This sounding was the cause of considerable additional work in that area during the course of which another 11 fathom spot was found, a slight distance to the west and south of the above position.

ANCHORAGES. There are no anchorages in the area covered by these sheets.

CURRENTS: No currents of an exceptional nature were noted during the progress of the survey.

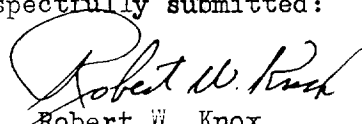
COMPARISON WITH PREVIOUS SURVEYS: No photostats of previous surveys were furnished the party

BOTTOM. With the exception of the area between latitude 33° 39.0 and 33° 41.4 and longitude 118° 11.0 and 118° 15.0, where many fine and coarse brown sand specimens were brought up, the bottom was invariably fine gray sand.

GEOGRAPHIC NAMES. Geographic names covered by these sheets will be discussed on the descriptive reports of the inshore sheets.

PLOTTING. The plotting of these sheets was done by civilian draftsmen under the occasional supervision of the writer.

Respectfully submitted:


Robert W. Knox,
H. & G. Eng'r.

*Applied to chart 5143
Jan 17 1925 H.W.K.*

STATISTICS

SHEET 21

Date	Vol	Day	St mi sdg	Positions	Sdgs	Boat
1933						
Jul 17	1	a	13.7	52	201	Romance
18	1	b	21.6	119	431	do
31	1	c	22.1	105	371	do
Aug 1	1	d	27.7	122	414	do
2	2	e	29.5	124	425	do
3	2	f	15.5	62	228	do
4	2	g	15.0	60	210	do
7	2	h	14.6	56	211	do
8	2-3	j	28.6	112	406	do
9	3	k	28.4	123	405	do
10	3	l	9.9	37	126	do
Totals, fiscal year 1934			229.6	972	3458	
1934						
Aug 31	3	m	14.3	38	174	do
Sep 4	3	n	15.7	77	170	do
11	3	p	10.5	58	125	do
18	4	q	3.5	19	29	do
25	4	r	5.2	28	51	do
Totals, fiscal year 1935			49.2	220	549	
Total for sheet			278.8	1192	4007	

STATISTICS

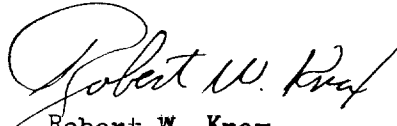
SHEET 22

Date	Vol	Day	St mi sdg	Positions	Sdgs	Boat
1933						
Aug 15	1	a	22.2	67	228	Romance
16	1	b	17.7	53	234	
23	1	c	34.2	128	425	
24	1 & 2	d	28.3	111	358	
29	2	e	17.5	74	185	
30	2	f	17.5	57	200	
Sep 5	2	g	11.8	51	125	
18	2	h	14.6	68	127	
24	2	j	8.6	32	111	
25	3	k	11.4	38	127	
			<hr/>	<hr/>	<hr/>	
	totals		183.8	679	2120	

APPROVAL OF CHIEF OF PARTY

Hydrographic sheets No. 21 and 22 and accompanying records have been inspected and approved by me. The field work on sheet 21 was done under my occasional supervision, with the exception of a slight amount of work accomplished this year; the field work of sheet 22 was done under my direct supervision. The office work on both sheets was done under my occasional supervision.

No additional work is considered necessary.


Robert W. Knox,
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5523

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

Number of positions on sheet	1192
Number of positions checked	0
Number of positions revised	0
Number of soundings recorded	4007
Number of soundings revised	20
Number of signals erroneously plotted or transferred	0

Date: November 12, 1934

Cartographer: James M. W. Lucey

Verification of protracting

Verification & inking of rocks and shoals

by

J. M. W. Lucey

Time: 12 hrs

Verification of inking

&

inking

by *James M. W. Lucey*

Time: 17 1/2 hrs

Review by

H. W. Murray

Time: 53

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5524.

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

Number of positions on sheet	..679
Number of positions checked	...70
Number of positions revised	...1
Number of soundings recorded	2120
Number of soundings revised	..29
Number of signals erroneously plotted or transferred	...0

Date:.....Nov. 9, 1934.....

Cartographer:.....M. SILVERBERG.....

Verification of protracting
Verification & inking of rocks and shoals) by M. Silverberg

Time: 2 hr.

Verification of inking by M. Silverberg

Time: 28½ hr

Review by H.W. Murray

Time: 2¼ ..

11 5523
4-5524

Duplicate

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Long Beach, California,

October 5, 1934, 19

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Robert W. Knox

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	Latitude		Longitude		Datum			
	°	D. M. meters	°	D. P. Meters				
*TANK (tank, Sunset Beach)	33	43	858.6	118 04	1030.4	NA-27	tri	5101
*TOWER High School Tower) (Huntington Beach)	33	40	1159.7	118 00	139.4	do	do	5101
*BLACK TANK Aerator) (Black tank near)	33	37	1702.2	117 56	300.3	do	do	5101
*TOWER School Tower) (Newport Beach High-)	33	37	681.2	117 54	1156.4	do	do	5101
TOWER (Balboa Pier Hotel)	33	36	185.2	117 53	1466.5	do	do	5128
SPIRE (Balboa Pavilion)	33	36	301.3	117 53	1354.9	do	do	5128
GOLD DOME (Lido Isle Gold Dome)	33	36	1204.0	117 55	63.9	do	do	5128
SPIRE Spire) (Lido Isle Clubhouse)	33	36	1112.5	117 54	1264.4	do	do	5128
WB TOWER Newport) (Weather Bureau Tower)	33	35	1299.5	117 52	1333.3	do	do	5128
			delete					
TANK (other objects more conspicuous)	33	42.7		118 03.1				5101
TANK (gone)	33	36.4		117 53.8				5128

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

. October 23, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5523

Locality South of San Pedro Bay, Coast of Southern California

Chief of Party: Robt. W. Knox, 1933-34

Plane of reference is mean lower low water, reading
0.0 ft. on tide staff at Balboa, "A" Street Pier
7.0 ft. below B.M. 3

3.6 ft. on tide staff at Los Angeles Outer Harbor
14.0 ft. below B.M. 8

Height of mean higher high water above plane of reference is
5.2 ft. at Balboa, "A" Street Pier and 5.4 ft. at Los Angeles
Outer Harbor.

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.

October 23, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5524

Locality Southeast of San Pedro Bay, Coast of Southern California

Chief of Party: Robert W. Knox in 1934
Plane of reference is mean lower low water, reading
0.0 ft. on tide staff at Balboa "A" Street Pier
7.0 ft. below B.M. 3

Height of mean higher high water above plane of reference
is 5.2 feet.

Condition of records satisfactory except as noted below:

Hammann

Acting Chief, Division of Tides and Currents.

MAY. 9, 1934

Verification Report H-5524.

1. Conformity to Hydrographic Manual.

The sounding records are neat and legible and conform to the requirements of the hydrographic manual ~~except as noted on the reverse~~ *from*

The statistics recorded on the cover of Vol. 2 were in error and corrected as indicated. ✓

The position numbers were poorly spaced, being much too far from the position points. ✓

No fractions of fathoms between ten and eleven were shown and had to be corrected. ✓

~~No Recoverable stations (Form 524) nor the Special Chart for the U. S. Lighthouse Service (Circular No. 30, 1933) were submitted.~~

No datum was indicated on the smooth sheet. ✓

2. Depth Curves.

The ten fathom curve is complete as far as the limits of this sheet. ✓

3. Field Plotting.

The field plotting was complete to the extent required for the soundings. ✓

The plotting of hydrographic positions was verified carefully. The protracting of 10% of the position was checked. ✓

Position 20c (Lat. 33°38'.15, long. 118°03'.30) did not agree with the course. Two position numbers were wrong and four were omitted. ✓

4. Office Plotting.

The office plotting as done by the verifier was the correction of discrepancies as outlined under No. 3 (Field Plotting). ✓

5. The junctions with H-5523, H-5532, H-5533 could not be made because the above sheets had not been verified. An overlap to the northwest was made on H-5487, it having the larger scale. ✓

Respectfully submitted,

Morton Silverberg
Morton Silverberg.

Nov. 12, 1934

VERIFICATION REPORT ON H-5523.

Report on: H-5523.

Chief of party: Robert W. Knox.

Protracted by: L. C. Rasmusson, N. S. Kansen, D. V. Radcliffe.

Verified and inked by: J. M. McQueen, Jr.

Surveyed in: July, 1933 and Sept., 1934.

Surveyed by: J. C. Mathisson.

Soundings plotted by: R. W. Knox.

1. The soundings recorded were neat and legible and conformed to the general instructions given in the Hydrographic Manual. ✓

2. The limits of the sheet ranged from ten and a fraction to eighteen fathoms, with only a very short section of twenty fathom curve appearing. ✓

3. Field plotting was very complete with few mistakes or omissions. Twenty soundings were revised. There seemed to be some doubt in the mind of the plotter of what to do when the fraction was five-sixths of a fathom. In some cases it was dropped, and in others it was changed to the next highest fathom. ✓

Position numbers were rather poorly spaced with respect to the positions. ✓

All ten fathom soundings were corrected to include quarter fathoms due to an order issued subsequent to the field plotting. ✓

4. The smooth sheet was accompanied by a tracing of the positions. This tracing was compared with the boat sheet and all positions checked very well. Consequently, no positions were reprotracted. ✓

5. Sheet H-5524, which joined the east side of the sheet, made a satisfactory overlap. ✓

Sheet H-5485 barely touched the sheet on the west side. Several soundings were transferred and these were satisfactory. ✓

Sheets H-5486 and H-5487 joined the sheet on the north. Both of these sheets were on double the scale of H-5523 so soundings were transferred from it to them. In both cases the overlap was satisfactory. ✓

Respectfully submitted,



J. M. McQUEEN, JR.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5523 (1933-34)

South of San Pedro Bay-San Pedro Channel- California.

Instructions dated February 17, 1933 (R.W.Knox)

Surveyed July, 1933-Sept. 1934.

Machine Soundings

3-Point Control on Shore Signals.

Chief of Party- R. W. Knox
Surveyed by- J. C. Mathisson
Protracted by- C. L. Rasmusson- N. Skansen
Soundings penciled by R.W.K.
Verified and inked by- J.M. McQueen

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual.

2. Compliance with Instructions for the Project.

The plans, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

Such cross lines as were run or result from the work are in excellent agreement with the main system of lines.

4. Depth Curves.

Within the limits of this survey the usual depth curves may be satisfactorily drawn.

5. Junctions with Contemporary Surveys.

(a) The junction with H-5524 (1934), H-5487 (1933-34), H-5486 (1933-34) and H-5485 (1933) are satisfactory.

(b) The junction on the south with the work of the Pioneer will be considered when that work is received from the field.

6. Comparison with Prior Surveys.

Prior surveys falling within the limits of the present survey are as follows:

H-289 (1851)	H-2282 (1897)
H-7062 (1859)	H-4162 (1920)
H-1417 (1878)	H-4504 (1925)
H-1418 (1878)	H-4547 (1926-28)
H-1904 (1889)	H-4560 (1926)

A detailed study was made of each of the above surveys and a comparison

made with the present survey. Soundings are generally in good agreement with those of H-5523 (1933-34) except as follows:

(a) H-4547 (1926 and 1928)

The two 11 fathom soundings (pressure tube) in lat. 33°41'.1, long. 118°13'.8 fall in depths of 12 to 13 fathoms on the present survey. Other soundings (tube and fathometer) of H-4547 (1926-28) falling within the limits of H-5523 (1933-34) agree within 1 fathom with occasional differences of as much 2 and 3 fathoms. The fact that these elevens in general, are considerably less than the minimum accepted for accurate tube soundings together with the fact that no shoaling indications were found on the present survey nor on H-4162 (1920) is sufficient reason for omission of these soundings in future chartings.

(b) H-4560 (1926).

The 11, 10 and two 11 fathom soundings (charted) in lat. 33°40'.5, long. 118°14'.4; lat. 33°40'.4, long. 118°13'.3; and lat. 33°39'.9, long. 118°13'.2; respectively, fall in depths of 12 to 13 fathoms on the present survey. They are all pressure tube soundings. The fact that these depths are considerably less than the minimum accepted for accurate tube soundings together with the fact that no shoaling indications were found on the present survey nor on H-4162 (1920) is sufficient reason for omission of these soundings in future chartings.

7. Comparison with Chart No. 5143.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and very satisfactory and no additional field work is required.

10. Superseding Previous Surveys.

Within the area covered H-5523 (1933-34) supersedes the following surveys for charting purposes.

H-289 (1851)	In part
H-706a (1859)	" "
H-1417 (1878)	" "
H-1418 (1878)	" "
H-1904 (1889)	" "

10. Superseding Previous Surveys(cont.).

H-2282 (1897) In part
H-4162 (1920) " "
H-4504 (1925) " " This is on a scale of 1:120,000.
H-4547 (1926-28)" "
H-4560 (1926) " "

11. Reviewed by Harold W. Murray. November 23, 1934.

Inspected by -A. L. Shalowitz.

Examined and approved.

C. K. Green
Chas. K. Green,
Chief, Section of Field Records.

H. S. Gordon
Chief, Section of Field Work.

R. C. Gilbert
Chief, Division of Charts.

G. W. Wade
Chief, Division of H. and T.

Section of Field Records.

REVIEW OF HYDROGRAPHIC SHEET NO. 5524 (1934).

South East of San Pedro Bay-San Pedro Channel- California.
Instructions dated February 17, 1933 (R. W. Knox).
Surveyed Aug. 15, - Sept. 25, 1934.

Hand Lead and Machine Soundings - 3-Point Control on Shore Signals.

Chief of Party- R. W. Knox
Surveyed by- R. W. K.
Protracted by- N. Skansen - D.V. Radcliffe
Soundings penciled by R. W. K.
Verified and inked by- M. Silverberg.

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual except as follows:

(a) No dates of location of triangulation stations were shown. These were added in the office.

2. Compliance with Instructions for the Project.

The plans, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

No cross lines were run. Agreement of soundings with adjacent lines is satisfactory.

4. Depth Curves.

The usual depth curves may be satisfactorily drawn.

5. Junctions with Contemporary Surveys.

The junction with H-5533 (1934), H-5532 (1934), H-5487 (1933-34) and H-5523 (1934) are satisfactory.
The junction on the south with the work of the PIONEER will be considered when that work has been received from the field.

6. Comparison with Prior Surveys.

Prior surveys falling within the limits of the present survey are as follows:

H-289 (1851)	H-4162 (1920)
H-1418 (1878)	H-4560 (1926) Scale 1:120,000

A detailed study was made of each of the above surveys and a comparison made with the present survey.

Soundings are generally in good agreement with those of the present survey.

7. Comparison with Chart No. 5102.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

Field protracting and plotting of soundings were excellent.

9. Additional Field Work Recommended.

This survey is complete and very satisfactory. No additional field work is required.

10. Superseding Previous Surveys.

Within the area covered, H-5524 (1934) supersedes the following surveys for charting purposes:

H-289 (1851)	In part
H-1418 (1878)	" "
H-4162 (1920)	" "
H-4560 (1926)	Scale 1:120,000 In part.

11. Reviewed by- Harold W. Murray, November 26, 1934.

Inspected by- A..L. Shalowitz.

Examined and approved:

Chas. K. Green, *C. K. Green*
Chief, Section of Field Records,

W. S. Bond
Chief, Section of Field Work.

L. O. Dolbert
Chief, Division of Charts.

G. Wade
Chief, Division of H. and T.

25 Jan 13, 1936
O. C. S.

Applied to Chart 5101 -	May 1936	R.M. Z.
Applied to chart 5148	May 1943.	L.A.M.
" " " 5142	1950	"