4744a 4744cwo.

Diag. Cht. No 5101-2

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Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	### *** *** *** *** *** *** *** *** ***
E. Augusta	5
State: California	
DESCRIPTIVE REPORT.	
Eyarographio Sheet No. 47448	
4744C.W	IRE DRAGE
San Diego Bay	
San Diego Harbor	
	ene juice
	we styled
1928	
CHIEF OF PARTY:	
F. G. Engle	
S-32-33-634	

Statistics and hist of bounds of Additional World added to this report way 17, 1928 cars

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

		Reg	gis	ste	er	No	· .	 	4.	7.4	14	18	1			
•	Californi	a				•	•	٠	•				٠	•	•	,

General locality San Diego Harber Bay
Locality . Reported . 27 ft., spot. San Diego Harbor
Chief of party F. G. Engle
Surveyed by J. Senior
Date of survey February . 2, 1928
Scale 1/5000
Soundings in . Feet
Plane of reference M.L.L.W
Protracted by . $T_{\bullet}B_{\bullet}R_{\bullet}$ Soundings in pencil by . $T_{\bullet}B_{\bullet}R_{\bullet}$.
Inked by
Records accompanying sheet (check those forwarded):
Des. report,
Sounding books, Wire-drag books, Photographs.
Data from other sources affecting sheet

Remarks:

State

Sheet #1.

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4744a

San Diego Bay

Surveyed in 1928

Instructions dated January 11, 1928

Chief of Party, F. G. Engle.

Surveyed by J. Senior.

Protracted and soundings plotted by T. B. Reed.

Verified and inked by F. B. Kelly.

- 1. The records conform to the requirements of the General Instructions.
- 2. The plan and character of development fulfill the requirements of the General instructions.
- 3. No curves were drawn by the field party.
- 4. Crossing lines show good agreement.
- 5. Only one shoal spot was discovered, 26 feet being the minimum depth.
- 6. Beacons Nos. 5, 6, and 8 were plotted slightly in error, due probably to a distortion in the photostat copy of Topo. 4008 from which they were taken. Signal@Ad was also in error. These changes probably caused the slight error in 4 fixes.
- 7. Fifty-five fixes of a total of 174 were checked.
- 8. In 11 instances where the compass course changed between fixes this change was overlooked in plotting the smooth sheet.
- 9. Soundings while turning between fixes were plotted as on the boat sheet.
- 10. Field work good.
- 11. Report by F. B. Kelly, March, 1928.

Copy for Record Section files.



March 16, 1928.

Pivision of Hydrography and Popography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET 47448

Locality:

SOUTHERN CALIFORNIA.

Chief of Party: 7. 6. Engle. 1926.

Plane of reference is M.L. W

2.0 ft. on tide staff at San Diego (C.& G.S.Staff)

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.

Thusk

Chief, Division of Tides and Currents.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-VEC

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 28, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4744 A and C.

Examination of shoal off Beacon #8, San Diego Harbor.

Surveyed in 1928.

Instructions dated January 11, 1928 (DISCOVERER).

Chief of Party F. G. Engle.

Surveyed by - F. G. Engle (Wire Drag), J. Senior (Hydrography).

Protracted and soundings plotted by T. B. Reed.

Verified and inked by F. B. Kelly.

Drag Work plotted and inked by T. B. Leed.

Verified by G. Risegari.

- 1. This survey was made primarily for the purpose of examining a 27 foot shoal reported by the Navy Department in the vicinity of lat. 32-43-101 m., long. 117-11-1517 m. The original survey (H-4268) from which the shoal was charted showed a 27 foot sounding about 40 meters to the westward of the one found by the Navy and another 27 foot sounding about 75 meters further west where the Navy reported depths of 40 feet.
- 2. As the present survey corroborated in a general way the depths found by the Navy, an examination was made of the original survey (H-4268), to determine whether any errors were made in the plotting. The lines containing the shoal in question were re-plotted on a 1-5,000 scale sheet and the soundings carefully spaced thereon. The re-plotting differed radically from the original plotting so a careful study was made of the old plotting with a view to determine wherein the verifier erred. As best as could be determined the following appears to be what happened.

H - 4744 A & B - 2

- Q. Positions 67 and 68 q were correctly plotted, but the soundings on these positions were interchanged, and a 27 foot sounding placed on 68 q and a 32 foot sounding on 67 q, instead of the reverse. Had this not occurred, a 27 foot sounding would have been charted much closer than where the U.S.S.TEXAS grounded.
- b. Position 69 q was apparently correctly plotted, but instead of connecting 68 and 69 q, 68 q and 69 m were connected and the soundings spaced thereon. As 69 m plots about 259 meters to the westward of 69 q, it is readily seen where the 27 foot sounding on the line 68 69 q would be thrown.
- 3. The replotting of the old work substantiates very closely the new survey as well as the findings by the Navy (letter 27-1928) to wit:
 - a. That a 27 foot shoal exists considerably to the eastward of the shoal as shown on Chart 5107.
 - b. That in the position of the 27 foot shoal as charted at present, there is approximately 40 feet of water.
- 4. No additional work seems necessary in view of the corrections made in the original plotting of H-4268. However, attention is directed to the following:
 - a. The work has not been maxemaked extended inshore to the 6 foot curve as called for in par. 4 of the Specific Instructions.
 - b. A clearance depth should have been obtained over the shoal in question in order to determine the least depth over it.
 - c. An examination should have been made of the 33 foot wire drag grounding in lat. 32-43-192 m., long. 117-12-56 m. A note in the drag record (pos. 29 A) says "Drag grounded at N. Buoy, but drifted off as soon as launch was stopped." It should be noted that this is only 28 meters away from a 34 foot sounding found on the hydrographic survey (83-84 a, H-4744 a). This sounding is marked "rky" and is from 3 to 10 feet shoaler than the surrounding depths. This shoal is well out towards the channel and should water shoaler than that found on this survey exist here, it would be a far greater menace to navigation than the above considered 27 foot shoal. It should :. be investigated.

- 5. Attention is called to the fact that the conclusion reached above relative to the reported 27 conflicts with the statement by the Chief of Party in the descriptive report and in par. 4 of Letter 85-1928 that "No indication of the reported 27 foot spot was found." This discrepancy is readily explained by referring to the wire-drag boat sheet where the reported 27 is plotted considerably to the eastward of where the Navy reported it and well within the 29 foot drag area. This probably came about in the following manner: Paragraph 2 of the specific instructions directs attention to the fact that the Navy has reported the existence of a 27 foot shoal lying about 350 feet eastward of the charted 27 foot shoal. When the present survey party made a hydrographic examination of the area they found a 27 foot spot considerably to the eastward of the charted 27. Now instead of measuring 350 feet from the charted 27, they measured this distance from the 27 which they found and spotted this on the wire drag boat sheet, naturally, there is no such depth at this point. Had they measured the distance from the correct point they would have found that the shoal which they developed on the hydrographic sheet agrees approximately with that found by the Navy. Therefore all remarks in the descriptive report and in Letter 85-1928 relative to the existence of this shoal should be disregarded.
- 6. No A & D sheet has been prepared for the wire drag sheet as the effective depths are clearly apparent.
- 7. Attached to the descriptive report and as a part of this review is a tracing showing the results of the study made in connection with the original hydrographic sheet (H-4268). The tracing is self explanatory and needs no further comment.
- 8. Reviewed by A. L. Shalowitz, March, 1928.

Approved:

Chief, Section of Field Records (Charts).

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

47440

FORM 504 DEPARTMENT OF COM U. S. COAST AND GEODETIC S	
State: California	·
DESCRIPTIVE REI	, ** ;
Hydrographio Sheet No. 4	744b
LOCALITY:	
San Diego Harbor	
Municipal Wharf	<u>-</u>
1928	
CHIEF OF PARTY	: :

I Shut Statistics of additional Work, added to this report May 17,1928

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3 4744b

State
General locality . San Diego Harbor
Locality Municipal Wharf
Chief of party F. G. Engle
Surveyed by J. Senior
Date of survey February 1 - 2, 1928
Scale 1/5000
Soundings in Feet
Plane of reference . M.L.L.W
Protracted by $.\mathbf{T}_{\bullet}.\mathbf{B}_{\bullet}.\mathbf{R}_{\bullet}$ Soundings in pencil by $.\mathbf{T}_{\bullet}.\mathbf{B}_{\bullet}.\mathbf{R}_{\bullet}$.
Inked by Verified by
Records accompanying sheet (check those forwarded):
Des. report, 1 Tide books, Marigrams, 1. Boat sheets;
Sounding books, Wire-drag books, Photographs.
Data from other sources affecting sheet

Remarks:

Sheet #3.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET (FIELD #3) - - - SAN DIEGO HARBOR, CALIF.

Executed in accordance with Director's Instructions dated December 22, 1927.

Surveyed by wire center hand lead line from launch of U.S.S. DISCOVERER.

The Smooth Sheet was made and plotted prior to the receipt of Plane Table positions and these were scaled from a photostat of Topographic Sheet No., 4008 (@Pier. Nip. Sup. & My and @Ad). @Pay was a banner located from a 3 point, fix using the photostat as a Sheet and & Court House @Ad & Square Chimney, Red Brick Bldg., and @Pier.

© San was a banner and was located by a cut from a 3 point fix at © Day using the chart as a sheet, and the distance from the edge of the pier. The pier lines were taken from the chart with the exception of the end of the old pier at ⊕ San which was corrected.

The soundings were reduced by a staff guage at Municipal Pier which was connected with C.& G.S. bench mark #13.

Respectfully submitted.

F. G. Engle

H. & G. Engineer,

Chief of Party.

STATISTICS FOR HYDROGRAPHIC SHEET NO.3

Day Date	No.of Pos.	No. of Sdgs.	Ne. Miles	Vessel
a Feb.	134	377	13.8	Stbd. M. S
b # 2	51	131	6.0	
Total	185	508	19.8	

NOH.

Copy for Record Section files.

March 16, 1928.



Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET

Locality: SAN DIRGO HARBOR, CALIFORNIA.

Chief of Party: P. G. Engle, 1928.

Plane of reference is

2.6 ft. cn tide staff at

San Diego (C.& G.S.Staff)

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".

Wenne

- 12. Legibility of record could be improved.
- 13. Remarks.

Chief, Division of Fides and Currents.

Report on H. 474446 Juney in 1928.

hief y Party. - F. S. Engle Summyd by - J. Junion Protracted + Plotted by - T.B. Read Verified and mend by - John & Lade

- 1. The record conform to the requirement of the
- 2. The plan and character of development fulfill.
- 3. The Sounding live crossing and adaptive.
- 4 The usual depth cures could be drown.
- 5. The field drafting was very good.
- as all the signal except Day and San"
 were platted in the small shall in the field
 from a photostot of Topographic sheet 4008
 If was found necessary after a direct
 check with the Topographic sheet 4008, to
 move signal, "rip" my and Sup, about 3 motor
 mosts.
- 7. as per a note signed by F. S. Cargle on the smooth sheet "O Day" was transferred from a 3 pt. P.T. fix on the photostat of T 4008 and o Som was from a CT. Cut from o Day" on chart

as a sheet its getter with the distance from the edge of the dock ."

John of Laces

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

AND REFER TO NO.

3-VEC

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 26, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4744b

Vicinity of Municipal Wharf - San Diego Harbor

Surveyed in 1928

Instructions dated Dec. 22, 1927. (DISCOVERER).

Chief of Party F. G. Engle.

Surveyed by Jack Senior.

Protracted and soundings plotted by T. B. Reed.

Verified and inked by J. G. Ladd.

- 1. The records conform to the requirements of the General Instructions.
- 2. This survey was intended primarily as an examination of the dredged channel north of the new Municipal Pier and adjacent to the sea wall. From the detailed hydrography done in the vicinity of the black and red horizontal striped buoy south of the old Municipal Pier, it would seem that the specific instructions were somewhat misinterpreted.
- 3. From the few widely spaced lines that were run in the questionable area it is evident that a shoaling has taken place and that Chart No. 5107 does not represent actual conditions. This applies to the channel running parallel to the Municipal Pier where a clear depth of 32 feet is shown on the chart and to the channel running parallel to the sea wall where a dredged depth of 20 feet is shown. This substantiates the general conclusion reached by the Naval Board of Investigation in connection with the grounding of the U.S.S. KINGFISHER. (Letter 657 1927).
- 4. While the depths in the main channel appear to be generally about the same as charted, there are several soundings on Chart No. 5107 that seem no longer to exist. They are as follows:

- a. The 32 foot sounding (auth. H-4268) 130 meters southwest of the S.W. corner of Municipal Pier, where the present survey shows 34 to 35 feet.
- b. The charted 32 foot sounding about 70 meters southwest of buoy S "5 B" falls amongst 35 and 36 foot soundings.
- c. The 31 foot sounding (auth. B. P. 18631) about 190 meters due west of the S.W. corner of Municipal Pier falls close to 35 foot sounding. However, since the original blue print shows similar depths surrounding it the sounding should not be removed from the chart.

It should be noted that while all of the above cases show evidence of possible changes, they should not be considered as conclusive since the late survey shows indications of lumpy bottom.

- 5. The usual field plotting was done by the field party. It should be noted that the Spar buoy to the north of the Municipal Pier and in line with its face was plotted by the field party about 32 meters west of its true position as based upon estimated distances from positions 12-13 b and 19 b.
- Attention is called to the following:
 - a. The red and black horizontal striped buoy to the south of the old Muricipal Pier was found to exist about 60 feet inshore of its charted position. Since it is intended to mark the outer end of the shoal it is essential that it be correctly shown.
 - b. The long dock to the south of the old Municipal Pier it not correctly shown on the chart.

The hydrographic sheet shows its correct outline (Letter 85-1928), and should be used as a basis for correcting the present charts.

Since the dock is falling to pieces, and appropriate legend to this effect should appear on the chart.

7. Additional work is required in the dredged channel north of the Municipal Pier and in the dredged channel adjacent to the sea wall to determine the full extent of the shoaling as was apparently contemplated by the specific instructions. However, if an indication of shoaling is all that was desired then this survey is sufficient.

H. $4744^{b} - 3$

8. Reviewed by A. L. Shalowitz, March, 1928.

Approved:

Chief, Section of Field Records (Charts)

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

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.

REGISTER NO. 4744b Add'l. Wark on Original Sheet

State	California	
General locality	San Diego Harbor	·
Locality	Off Municipal Piers	Wharf
Scale 1/5,000 Dat	e of survey April 16	,17,1928
Vessel	DISCOVERER	
Chief of Party	F.G.Engle	
Surveyed by	L.D.Graham	
Protracted by	G.R.Fish	
Soundings penciled by	G.R.F.	·
Soundings in #####s	feet	
Plane of reference	MLLW	·
Subdivision of wire dra	gged areas by	·
Inked by		·
Verified by		·
Instructions dated	April 2&%	, 1928
Remarks: Additiona	l work	
Statistics for addit	tional Work 1928 add	ed to orig report.
	GPO	cann

Statistics for Sheet H4744b Additional Work 1928-Shown on original Sheet

Date	Da	y Boat	Vol.No.	No.Sdgs.	No.Pos.	Stat. mi.sdg.lines
April	16 c	Stbd. Launch	2	391	112	7.1
n	17 d	11	2	418	90	7.0
To	tals			809	202	14.1

Copy for Section of Field Records files.

Division of Hydrography and Popography:

Division of Charts:

Tide reducers are approved in / volumes of sounding records for

A HYDROGRAPHIC SHEET

addl

Locality:

San Diego, California. Chief of Party:

Plane of reference in male. 1928 ft. on tide staff at ...

2.0

San Diego, (C.& G.S.Staff)

Condition of records satisfactory except as checked below:

- Locality and sublocality of survey omitted.
- Month and day of month omitted.
- 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.

Il fine

Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-DPM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 28, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4744b (Additional Work)

Surveyed in 1928.

Chief of Party, F. G. Engle.

Surveyed by L. D. Graham.

Protracted and soundings penciled by G. R. Fish.

Verified and inked by H. E. MacEwen.

- 1. The records conform to the requirements of the General Instructions, except that boats' headings by compass were omitted entirely.
- 2. This work was done to completely develop the dredged channel north of the new municipal wharf where indications of shoaling were noticed. It fulfills the requirements of the specific instructions in this respect.
- 3. The sounding line crossings are adequate.
- 4. The usual depth curves can be completely drawn in the developed areas.
- 5. The field drafting was very good.
- 6. No further surveying is required to fully develop important areas within the limits of this sheet.
- 7. Rating of work: (a) Character and scope of surveying, very good.
 (b) Field drafting very good.
- 8. Reviewed by H. E. MacEwen, May, 1928.

Sheet inspected by A. L. Shalowitz.

Approved:

Chief, Section of Field Records (Charts)

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

HYDROGRAPHIC TITLE SHEET

Wire Drag.

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey. Register No. 4744C General locality . . San Diego Harbor Bay Locality . . . Reported 27 ft., spot. San Diego Harbor . . Protracted by . T.B.R. . . Soundings in pencil by Inked by T.B.R. . . Verified by . . T.B.R. Records accompanying sheet (check those forwarded): Des. report, _1 Tide books, ____ Marigrams, _1 Boat sheets, Sounding books, ___ Wire-drag books, ___ Photographs.

Remarks: See Desc. Rep. with 4744a

Wire Drag Sheet #1.

C. & G. SURVEY L. & A. FEB 28 1928 Acc. No.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET (FIELD #1) -- (1 SOUNDING SHEET & 1 WIREDRAG SHEET). F.G. ENGLE, CHIEF OF PARTY. -- DIRECTOR'S INSTRUCTIONS DATED JAN.11,1928.

Soundings were taken with a wire center leadline from launch of U.S.C.& G.S.S. DISCOVERER.

No indication of the reported 27 ft., spot was found and the area was covered by a 500 ft., wire drag of the standard type using a canvas buoy and 35 lb., weight at each 100 ft., section and a 100 ft., towline to both end buoys and end weight which latter was a 70 lb., sounding shot. The lift was measured during the work and at moderately slow speed was found to be less 2 ft., in middle and less than 3 ft., at ends and at dead slow speed was 1 ft., in middle.

The drag depth was not as deep as was intended due to an error in figuring the setting of uprights but the reported 27 ft., spot was covered with a depth of 29 feet and in the absence of any indication from the soundings it would seem that there is no shoal at all at this point.

The position of eAD, Buoy #8 and eLON2 were transferred from the photostat of Topographic Sheet No., 4008 as the list of positions was not available at the time the Smooth Sheet was plotted.

Respectfully submitted,

H.& G. Engineer, Chief of Party.

second.

a. L.s

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 25, 1928.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4744° (Additional Work)

Examination of Shoal off Beacon No. 8, San Diego Harbor.

Surveyed in April, 1928

Instructions dated April 2, 1928

Chief of Party, F. G. Engle.

Surveyed by L. D. Graham.

Plotted and inked by G. A. Nelson.

Verified by R. L. Johnston.

- 1. The instructions for this work call for an investigation of the 34 foot, rocky, sounding located 350 meters northeast of Beacon No. 8, and an examination of the 33 foot spot where the drag grounded about 347 meters northeast of Beacon No. 8. Both of these spots were cleared by å drag with an effective depth of 30 feet. A sounding of 31 feet was obtained in this locality by the hydrographic party and is shown on hydrographic sheet No. 4781.
- 2. A least depth of 24 feet was established at the position of the 26 foot sounding previously obtained. The drag grounded here at pos.6 B with an effective depth of 25 feet. The point was later cleared with an effective depth of 23 feet.
- 3. The records conform to the requirements except that the length of the towline should have been plainly marked feet.
- 4. The depth and extent of dragging satisfy the instructions.
- 5. The overlaps are sufficient.
- 6. No further dragging is required within the limits of this work.

7.	The	field	plotting	was	well	done.

8. An Area and Depth Sheet has now been prepared to cover all the work in this larea.

9. Reviewed by R. L. Johnston, May 25, 1928.

Sheet inspected by C. L. Shalang.

Approved:

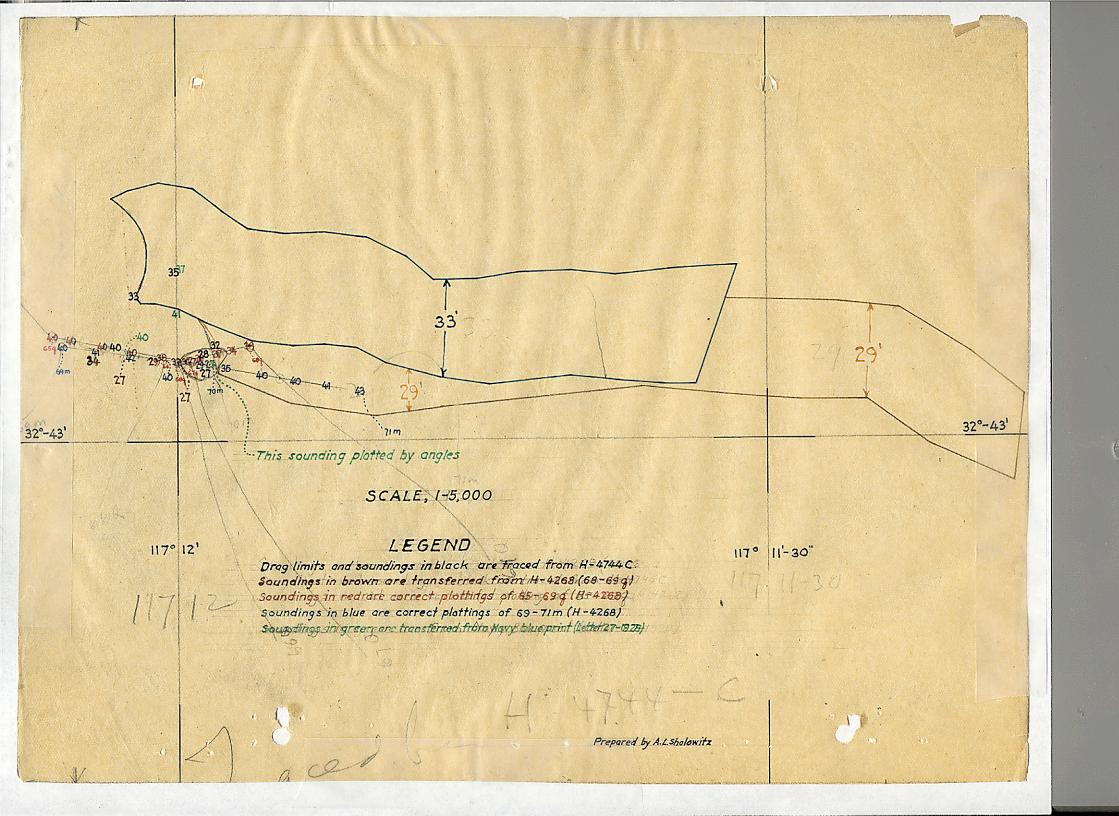
Chief, Section of Field Records (Charts)

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

LIST GROUNDS

TO ACCOMPANY WIRE DRAG SHEET NO.4744c Add'l.Wk. on original Sheet

Pos. 6 B: Grounded with an effective depth of 25 feet.
Sounding of 24 feet rocky, obtained. Cleared later with 23 feet.



STATISTICS FOR HYDROGRAPHIC SHEET NO. 1

WIRE DRAG

Day	Date	N	e. of Pos.	Eiles (statute)	Vessel
	Feb.	3	29	0.5	Stb'd M. S.
a	et	3	18	0.5	Port M. S.
Total			47	1.0	

SOUNDING

Day Date No. of Pos. No. Sdgs. Miles (statute) Vessel 8 Feb 3 174 380 16.1 Stb'd M.S.

Copy for Record Section files.

March 16, 1928.



Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET

4744

Locality:

SAN DIEGO HARBOR, CALIFORNIA.

Chief of Party:
Plane of reference is

ft. on tide staff at

San Diego (C.& G.S.Staff)

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".

Glade

- 12. Legibility of record could be improved.
- 13. Remarks.

Chief. Division of Tides and Currents.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WIRE DRAG THY THE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

F	ield No	
	REGISTER NO. 4744c Add'I	Work sheet
State	Californi s	
General locality	San Diego Harbor	
Locality N	orth of Aviation Base	
Scale 1/5.000 D	ate of survey April 18	, 1928
Vessel	DISCOVERER	
Chief of Party	F.g.Engle	
Surveyed by	L.D.Graham	·
Protracted by	G.A.Nelson	
Soundings penciled by	G.AN.	
Soundings in f#####	feet	
Plane of reference	MLLW	
Subdivision of wire d	ragged areas by	
Inked by		
Verified by		
	April 2 & 7	
•	litional work	
	s the work for H. 4781	

Statistics for Wire Drag Sheet No.4744c Add'I, Work-on orig. Sheet

Date Day Boat Vol. No. No.Pos. No.Sdgs. St.mi.drag lines
April 18 B Stbd.& 2 36 3 2.9
Port Launch

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in 2 volumes of sounding records for

HYDROGRAPHIC SHEET

Locality: BAN DINGO, CALIFORNIA.

Plane of reference is with

Plane of reference is with the plane of reference is with the staff at gan Diego (C.& G.B. Staff)

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"

Made

- 12. Legibility of record could be improved.
- 13. Remarks.

Chief, Division of Pides and Currents.