

# 4183

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NO. 4183

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# 4183

Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *California*

11-5613

DESCRIPTIVE REPORT.

*Hydro* Sheet No. *4183*

LOCALITY:

*Northern Coast*

*Solo Bank*

1921

CHIEF OF PARTY:

*E. H. Pugenhart*

DESCRIPTIVE REPORT

To accompany Hydrographic sheet of Tolo Bank

USS LYDONIA, May, 1921.

The work shown on this sheet is generally split lines on the original work where lines were widely spaced.

It was done with trolley except one days work in November, which was with each alternate sounding up and down.

The signals were located by topographic party.

The soundings were reduced from readings on subsidiary staff at Shelter Cove, except that the work on November 4th was reduced from the tide tables, as no direct tidal data was available.



E.H. Pagenhart,  
Chief of Party.

# HYDROGRAPHIC STATISTICS

BOAT U.S.S. Lydonia.

SHEET No. <sup>1</sup>  
Tolo Bank.

DATE	LETTER	VOLUME	MILES	SOUNDINGS	POS.	ANGLES	AREA
May 2, 1921	A	1	20.5	168	90	179	
May 3, "	B	1	30.5	321	121	244	
" 4, "	C	142	33.0	331	154	308	
" 5, "	D	2	15.5	235	83	166	
" 6, "	E	2	6.2	142	50	100	
May Totals			105.7	1197	498	997	30.0
Nov. 4, 1921	F	243	18.0	206	131	266	
			123.7	1403	629	1263	30.0

Verification Report of Hya. 4183.

The records for this work were in a fair condition. In some places they were poor. Lack of definiteness in time was noticeable throughout. Where the "stop" and "ahead" system was used the "ahead" time was never recorded. Other discrepancies appear here and there.

Two sounding machines were used. Whether they were used to sound simultaneously or alternately is not definitely stated, though the soundings were plotted as if the latter system was used.

While the plotting was good the plotting of soundings can only be described as careless or indifferent. There was little adherence to the correct spacing; soundings were plotted ~~where~~ where there were none such taken and omitted in other cases.

The "courses" in the records are few and unreliable. No "bottoms" are recorded save on two or three pages.

All the lines cross well.

Respectfully submitted,

Alvin Bacon

*Alvin Bacon*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

SECTION OF FIELD RECORDS.

REPORT ON HYDROGRAPHIC SHEET No. 4183

Surveyed in 1921.

Chief of Party: E. H. Pagenhart.

Soundings plotted by

W. T. Chovan.

Surveyed by O. W. Swainson and R. P. Eymann.

Verified and inked by A. Baer.

Protracted by W. T. Carter.

1. The records do not conform to the requirements of the General Instructions in the following respects:
  - Complete information regarding the sounding machines was not given.
  - The time when soundings were taken was not always stated.
  - Courses given in a number of instances were grossly in error, hence doubt was cast on all of them.
  - Changes in course often omitted.
  - Very few bottom characteristics were given.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The development is sufficient to permit the usual depth curves to be drawn.
6. The field plotting was completed to the extent prescribed in General Instructions. The protracting is good although the position numbers and day letters are too large and are carelessly done. Little attempt was made to space the soundings according to time intervals.
7. The junctions with adjacent sheets are satisfactory.
8. No further surveying is required within the limits of the sheet.
9. The character and scope of the surveying is good. The field protracting is good but the plotting of soundings by the field party was poor.
10. Reviewed by E. P. Ellis, February, 1922.

January 16, 1922.

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET 4183

Locality: Tolo Bank, Northern Coast of California.

Chief of Party: E. H. Pagenhart in 1921

Plane of reference is mean lower low water, reading

3.4 ft. on tide staff at Shelter Cove, California.  
\*4.0 " " " " " North Jetty Landing, Humboldt Bay.

\*Allowance made for difference in time at place of soundings

Condition of records: Satisfactory.



Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE  
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.

Register No. 4183 \* /

State . . California . . . . .

General locality . Northern Coast, Mendocino County . . . . .

Locality . . . . . Tolo Bank . . . . .

Chief of party . . E.H. Pagenhart . . . . .

Surveyed by . . . LYDONIA . . . . .

Date of survey . . May 2. - November 4, 1921. . . . .

Scale . . . . . 1:20000 . . . . .

Soundings in . . . Fathoms . . . . .

Plane of reference M.L.L.W. . . . .

Protracted by . . W.T.C. Soundings in pencil by W.T.C. . . . .

Inked by . . . . . Verified by A. Baer . . . . .

Records accompanying sheet (check those forwarded):

Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, \_\_\_\_\_ Boat sheets,

3 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet . . . . .

Remarks: